

**BEDFORD
13527**



**Division 100 – General Provisions
for
Design-Build Projects**

Replaces Division 100
of the
2010 Standard Specifications
for Road and Bridge Construction

**STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION**

February 17, 2011
Revised March 21, 2011

PREFACE

This project shall be constructed in accordance with NHDOT Standard Specifications for Road and Bridge Construction, 2010 Edition (hereafter referred to as the 2010 Standard Specifications). The 2010 Standard Specifications shall control the work on the Project except where modified by these Division 100 General Provisions, the Request for Proposal, the contract Special Provisions, or other Design-Build Contract Documents.

The 2010 Standard Specifications are written to govern work on Design-Bid-Build unit price construction projects. Design-Build projects are contracted on a Lump Sum basis with no allowances for any additional payment, except when specifically identified by the Contract.

The purpose of this page, which is part of the Design-Build General Provisions, is to modify the 2010 Standard Specifications. References and requirements contained in Division 100 of the 2010 Standard Specifications are modified to conform to a Lump Sum contract. References and requirements contained in Division 200-700 of the 2010 Standard Specifications are modified as follows:

The subsections “Methods of Measurement” and “Basis of Payment” are hereby deleted from each Section of Divisions 200-600 of the 2010 Standard Specifications and Supplemental Specifications because they do not apply to Lump Sum contracts. Payment for the Work on the Project will be made under a Lump Sum Bid Price except where specifically identified by the Contract.

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LIST OF REVISIONS
to
Division 100 General Provisions for Design-Build Projects
Previously Posted

Revision Date	List of Revisions (generally stated – see specification for actual wording)
February 17, 2011 (Indicated by single bar in margin)	<ul style="list-style-type: none"> • 102.03.2.1 – Updated Form requirements • 102.03.2.2.2.3 – Amended to reference RFP for Proposal Format • 103.02.1 – e-mail added as communication mode • 103.02.1.2.C – Reference updated • 103.02.2.2 – Amend criteria item to criteria Category • 103.02.2.3 - Amend criteria item to criteria Category • 103.02.2.4 – Amended to reference RFP for Score Sheet information • 103.02.2.5 – Clarification to Technical Scoring Procedure • 103.02.2.6 – Moved availability of Scoring Summary to 103.02.2.7 • 103.03.2 – Clarification of Computation of Best-Value Rating • 103.04 – Updated required documents upon award • 103.08 – Clarification of surety bond amount • 104.01.1 – Added Right-of-Way (ROW) information to project scope • 104.01.1.1 – Added utility coordination to Design Services • 104.01.1.2 – Clarification of ROW services • 104.15.15.1(5) – Amended for status updates to be for each parcel • 104.15.15.2 – Clarification of Eminent Domain procedure • 107.02 – Design-Builder is responsible for obtaining wetland permits
March 21, 2011 (Indicated by double bar in margin)	<ul style="list-style-type: none"> • 104.15.2.4.2 – Added paragraph ref: Early Release for Construction Plans • 104.15.9.4.7 – Expansion joints • 106.12.2.5 - Add "Professional" before Geologist • 106.14 thru 106.16 – Amend warranty periods from 5 and 10 years to one (1) year

DIVISION 100 - GENERAL PROVISIONS FOR DESIGN-BUILD PROJECTS**SECTION 101 -- DEFINITIONS AND TERMS**

101.01 General. The titles and headings of the Sections and Subsections are intended for convenience and do not bear on the meaning of the text.

When a publication is specified, it refers to the most recent date of issue, including all current updates and official interpretations, prior to the date of submission of the Technical and Price Proposals for the Project unless a specific issue date or year is specified herein.

Wherever the following abbreviations, terms, or pronouns are used in the Contract, the intent and meaning shall be interpreted as follows:

101.02 Abbreviations:

AAN	American Association of Nurserymen
AAR	Association of American Railroads
AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
AGC	Associated General Contractors of America
AIA	American Institute of Architects
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
ANSI	American National Standards Institute
ARA	American Railway Association
AREMA	American Railway Engineering and Maintenance-of-Way Association
ASCE	American Society of Civil Engineers
ASLA	American Society of Landscape Architects
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
AWPA	American Wood-Preservers' Association
AWWA	American Water Works Association
AWS	American Welding Society
CFR	Code of Federal Regulations
CGP	Construction General Permit
CPM	Critical Path Method
CQMP	Construction Quality Management Plan
DQMP	Design Quality Management Plan
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
FSS	Federal Specifications and Standards, General Services Administration
LRFD	Load and Resistance Factor Design
MUTCD	Manual on Uniform Traffic Control Devices
NEC	National Electric Code
NEMA	National Electrical Manufacturers Association
NETTCP	Northeast Transportation Technician Certification
NTPEP	National Transportation Product Evaluation Program
NHDOT	The State of New Hampshire Department of Transportation
NPDES	National Pollutant Discharge Elimination system
OSHA	Occupational Safety and Health Administration
QA	Quality Assurance
QC	Quality Control
PQCP	Process Quality Control Plan
RFI	Request for Information
RFC	Release for Construction

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RFP	Request for Proposals
RFQ	Request for Qualifications
RSA	The New Hampshire Revised Statutes Annotated, 1955 together with all revisions amending same to date of submission of Technical and Price Proposals
SAE	Society of Automotive Engineers
SOQ	Statement of Qualifications submitted in response to RFQ
SSPC	Steel Structures Painting Council
UL	Underwriter's Laboratory
USACOE	United States Army Corps of Engineer

101.03 Accept or Acceptance. Unless otherwise explicitly stated, these words refer to the Department's acceptance of work or materials for the purpose of initiating a Progress Payment(s) to the Design-Builder.

101.03.1 Final Acceptance. The formal written acceptance by the Commissioner indicating that the Design-Builder has complied with all requirements of the Contract and it has been completed in all respects, except for any Design-Builder warranty issues.

101.04 Adjustment. Increase or decrease in the Contract Time or Contract Amount in accordance with 108.07 or 109.04 respectively.

101.05 Advertisement. A public announcement inviting statements of qualifications.

101.06 Alternative Technical Concepts. Concepts that deviate from the requirements set forth in the RFP and that have been included in the Proposal with the Department's prior approval.

101.07 Amendment. Revision to the RFP.

101.08 Angle of Crossing. The right or acute angle formed by the intersection of the centerline of the upper roadway with a line parallel to the face of the abutment of a bridge or with the centerline of a culvert.

101.09 Approved Material. Material approved by the Department for use in the work.

101.10 Award. The acceptance of a proposal from a Bidder that provides the best value to the Department pending Governor and Council approval.

101.11 Base Course. One or more layers of specified or selected material of designed thickness placed on a properly prepared subbase or subgrade to support a surface course.

101.12 Best Value. The overall combination of quality, price and other qualitative elements of the required services that are used to determine the successful Bidder.

101.13 Bidder. An individual, partnership, firm, corporation, or any combination thereof, or joint venture, submitting a Design-Build Proposal in response to a Request for Proposal. After execution of the contract, the Bidder is known as the Design-Builder.

101.14 Bid Bond. See Proposal Guaranty.

101.15 Bid (Total). Total dollar amount of the Proposal.

101.16 Bid Documentation. All writings, working papers, computer printouts, charts, and all other data or compilations of data that contain or reflect information or calculations used by the Bidder to determine the Total Bid and Lump Sum Bid Price indicated in a submitted and opened Proposal, including but not limited to information relating to the determination and application of:

- Equipment rates
- Overhead rates and related time schedules
- Labor rates
- Efficiency or productivity factors

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- Arithmetic extensions
- Subcontractor and material supplier quotes

Any manuals standard to the industry that are used by the Bidder in determining the Proposal may be included in the bid documentation by reference and shall show the name and date of the publication and the publisher.

The term "Bid Documentation" does not include documents provided by the Department for the Bidder's use in the preparation of the Proposal.

101.17 Bid Schedule. The schedule included in the Proposal, if requested, containing the estimated quantities of contract pay items for which Lump Sum Bid Price is invited.

101.18 Bridge. As provided by RSA 234:2, a structure having a clear span of 10 ft. (3.048 m) or more measured along the center line of the roadway at the elevation of the bridge seats, spanning a water course or other opening or obstruction.

101.19 Calendar Day. A day shown on the calendar.

101.20 Cement. Unless otherwise designated, this term will refer to Portland cement.

101.21 Certificate of Compliance. A document in the format prescribed in the Contract certifying that material incorporated in the Work complies with the Contract.

101.22 Change Order. A revision to the Contract issued after Award. The Change Order establishes the increase or decrease to the Contract Quantities, Contract Amount or Contract Time, if any, for the revision in accordance with 104.02.

101.23 Commissioner. The Commissioner of The State of New Hampshire Department of Transportation.

101.24 Completion (Project). Completion of the Project occurs when the Design-Builder has completed all work required by the Contract; has satisfactorily executed and delivered all documents, certificates, and proofs of compliance required by the Contract, and has received Final Acceptance from the Commissioner. The Maintenance or Warranty Bonds are normally activated at the Completion of the Project.

101.25 Conduit. Unless the connotation is to the contrary, a tube intended to carry electrical or other utilities.

101.26 Construction Project Manager. The Design-Builder's individual responsible for managing all construction activities during the construction process, including all QC activities to ensure the materials used and work performed meet contract requirements.

101.27 Construction Zone. As provided in RSA 266:20, a zone designated by the Commissioner. See 105.12.

101.28 Contract. The written agreement between the Department and the Design-Builder setting forth the obligations of the parties relative to the performance of the Work. The Contract includes the documents specified in the RFP, Notice to Proceed and any supplemental agreements that are required to complete the Work in an acceptable manner.

101.29 Contract Administrator. The field representative of the Department having direct supervision of the administration of the Contract for the State.

101.30 Contract Amount. The original amount Bid by the Design-Builder, shown as the "Bid Total" in the Price Proposal.

101.31 Contract Bond. The approved form of security in compliance with RSA 447:16 executed by the Design-Builder and the Surety or Sureties, guaranteeing complete execution of the Contract, including the payment of all legal debts pertaining to the construction of the project.

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101.32 Contract Time. The Working Days (time) allowed for completion of the Work, or phase of work, or the Completion Date stated in the RFP including authorized time extensions. See 108.07.

101.33 Contract Total. The Contract Amount plus any amount added or subtracted by contract revisions.

101.34 Contract Pay Item. A specifically described item of work for which a price is provided in the Contract.

101.35 Contractor. See Bidder and Design-Builder.

101.36 Controlled Access Highway. See right-of-way terms.

101.37 Critical Path. The longest continuous sequence of work for which the combined duration of the work's individual scheduled activities produces the minimum overall project duration. Activities on the critical path that control the project's completion:

- a. **Critical Activity.** Any activity on the critical path
- b. **Controlling Activity.** A Critical Activity that would normally be in progress at a given moment.
- c. **Milestone.** Fixed date marking the beginning or end of specific work; phases of work; or completion date(s) as specified in the Contract.

101.38 Cul-De-Sac. A local street open at one end only and with special provision for turning around.

101.39 Culvert. Any structure not classified as a Bridge that provides an opening under any roadway.

101.40 Day. Unless designated as a Working Day, or unless otherwise indicated, this term will mean a Calendar Day.

101.41 Delay. Any event, action, force, or factor that would cause the established Contract Time to be exceeded for performance of the Contract. See 108.07.

- a. **Compensable Delay.** An excusable delay for which the Design-Builder may be entitled to compensation.
- b. **Excusable Delay.** A delay beyond the Design-Builder's control and not caused by the Design-Builder's fault or negligence, which the Design-Builder could not have reasonably foreseen, and for which a Contract or phase time extension may be granted.
- c. **Noncompensable Delay.** Excusable delay for which the Design-Builder may be entitled to an extension of time but no additional compensation.
- d. **Nonexcusable Delay.** A delay that was reasonably foreseeable and within control of the Design-Builder for which no compensation or time extension will be granted.

101.42 Department. The State of New Hampshire Department of Transportation, designated as the party of the first part to the Contract.

101.43 Design-Builder. The individual, partnership, firm, corporation, or any combination thereof, or joint venture, contracting with the State to perform both the design and construction of prescribed work. Said person or persons, acting directly or through an authorized agent or employee, shall be designated as the party of the second part to the Contract. See Bidder and Contractor.

101.44 Design-Build Project Manager. The individual responsible for the overall management, scheduling, design, construction, quality management and contract administration for the Project.

101.45 Design Manager. The individual responsible for all aspects of the design including QA/QC of the end product. This individual shall be a licensed, Professional Engineer in the State of New Hampshire.

101.46 Drive and Entrance. See Right-of-Way terms.

101.47 Easement. A right acquired by public authority to use or control property for a designated highway purpose.

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101.48 Engineer. A New Hampshire Licensed Professional Engineer, who is an employee of the Design-Builder, or a subcontractor, with the responsibility and authority to require that the Work be performed in conformity with the Contract.

101.49 Equipment. All machinery and attachments, together with the necessary supplies for upkeep and maintenance, and all tools and apparatus necessary for the proper construction and acceptable completion of the Work.

101.50 Erosion. “Wearing away of land by running water, waves, wind, ice, abrasion, and transportation.” (New Hampshire Stormwater Manual (Published by NH Department of Environmental Services)).

101.51 Escrow of Proposal Documentation. Preservation of the Proposal Documents, under 101.16, by the successful Bidder for use by the Department and Bidder in any claims or litigation between the two parties arising out of the Contract.

101.52 Executive Council. Five-member governing body that approves State Contracts.

101.53 Expression: By, or to the Engineer, the Design-Builder, or the Department. In order to avoid cumbersome and confusing repetition of expressions in these specifications, it is hereby provided that any and all of the following words or any form of such words, unless clearly indicated otherwise, shall be understood to be followed by the words “by the Engineer, by the Design-Builder, or by the Department” or “to the Engineer, to the Design-Builder, or to the Department”, unless the intent is clearly meant to refer to the Department:

Accepted, approved, authorized, condemned, considered, deemed necessary, contemplated, designated, determined, directed, disapproved, established, given, indicated, insufficient, ordered, permitted, rejected, required, reserved, satisfactory, specified, sufficient, suitable, suspended, unacceptable, or unsatisfactory.

101.54 Floodplain. A nearly flat, alluvial lowland bordering a stream, that is subject to inundation by floods.

101.55 Floodway. Channel of a stream plus any adjacent flood plain areas that must be kept free of encroachment in order that the 100 year flood be carried without increases in flood heights of up to a maximum of 1.0 foot (0.3 m).

101.56 Force Account. A basis of payment for revised work as provided for in 109.04.4.

101.57 Hazardous Material (toxic waste). Material as defined by RSA 147-A.

101.58 Highway, Street, or Road. A public way designated for purposes of vehicular travel or vehicular and pedestrian travel, including the entire area within the right-of-way.

101.59 Holidays. The following days are legal holidays in the State of New Hampshire used in determination of working days:

- New Year’s Day
- Martin Luther King, Jr./Civil Rights Day
- Washington’s Birthday (The third Monday in February)
- Memorial Day
- Independence Day
- Labor Day
- Columbus Day
- Veterans Day
- Thanksgiving Day
- Christmas Day

If any holiday listed above falls on Sunday, the following Monday shall be considered a holiday. If any holiday listed above falls on Saturday, the preceding Friday shall be considered a holiday.

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101.60 Independent Assurance Inspection (IAI). Unbiased and independent evaluations of all sampling and testing (or inspection) procedures used in a Quality Assurance Program. IAI provides an independent verification of the reliability of the Acceptance data obtained by the Department and the data obtained by the Design-Builder. The results of IA Testing or Inspection are not to be used as a basis of Acceptance or payment.

101.61 Independent Assurance Testing (IAT). A test conducted to check the calibration of the testing equipment and processes being used.

101.62 Inspector. The Design-Builder's authorized representative assigned to make inspections of the Work or related activities.

101.63 Invasive Species. An alien species whose introduction caused or is likely to cause economic or environmental harm or harm to human health (RSA 430:52 VII).

101.64 Joint Venture. A legal association of two or more firms to carry out a single, for-profit business enterprise, for which the parties combine their property, capital, efforts, skills, and knowledge, and is responsible for a distinct, clearly defined portion of the Work of the Contract and whose share in the capital contribution, control, management, risk, and profits of the joint venture are commensurate with its ownership interest.

101.65 Laboratory. The official testing laboratory of the Design-Builder or Department at Concord. A "recognized laboratory" is any laboratory that may be designated or approved by the Design-Builder and Department.

101.66 Lane. The portion of the traveled way for the movement of a single line of vehicles.

101.67 Limited Access Highway. See Right-of-Way terms.

101.68 Limits of Construction. An area with established boundaries, identified within the highway right-of-way or construction easements, where the construction is permitted.

101.69 Lump Sum Price. A single amount basis of payment contained in the Price Proposal Form for completion of all Work as defined by the Contract.

101.70 Major Participant. The Design-Builder and any Related Legal Entities, Affiliates, and/or Subsidiaries; The Builder and all Related Legal Entities, Affiliates, and/or Subsidiaries; The Designer and all Related legal Entities, Affiliates, and/or Subsidiaries; Any firm providing more than the percentage specified in the Project Requirements in the RFP of the value of the on-site construction work; And firm providing more than the percentage specified in the Project Requirements in the RFP of the value of the design work.

101.71 Materials. Any substances specified for use in the construction of the Project and its appurtenances.

101.72 Median. That portion of a divided highway separating the traveled ways for traffic in opposite directions.

101.73 Non-Participating Item. As used on the Plans for Federal-aid projects, an item in which the cost is not shared by the Federal Government.

101.74 Notice to Proceed. Written notice to the Design-Builder to proceed with the Contract work; also starts the Contract time, when applicable.

101.75 Operational Construction Signs. Warning signs used to advise and guide motorists through or around areas within a construction zone. Typically these signs are mounted on portable supports for short-term, short-duration, and mobile conditions.

101.76 Pavement Structure. The combination of subbase, base courses, and surface courses placed on a subgrade to support the traffic load and distribute it to the roadbed.

101.77 Permanent Construction Signs. Warning signs used to advise motorists approaching a construction zone. Typically, these signs are mounted on posts and are in place for the duration of the project.

101.78 Points of Access. See right-of-way terms.

101.79 Price Proposal. The component of the Proposal that includes pricing information, specifically the Price Proposal Form and other submission requirements.

101.80 Prequalification Statement. A completed form on which the Design-Builder has furnished information as to its ability to perform and finance the Work. See 102.01.

101.81 Profile Grade. The trace of a vertical plane intersecting the top surface of the proposed wearing surface, usually along the longitudinal centerline of the roadbed. Profile grade means either elevation or gradient of such trace according to the context.

101.82 Process Quality Control Plan (PQCP). The program and documentation of that program, approved by the Department, which specifies the actions, inspection, sampling, and testing necessary to keep production and placement operations within Specifications and contract requirements, including provisions to quickly determine when an operation has the potential to become out of control and those actions that the Design-Builder will take to restore compliance.

101.83 Project (Project Site). The specific section(s) of the proposed work together, with all appurtenances to be constructed under the Contract, and other locations designated by and in which the Department will allow construction activity or disturbance and may include the following, as approved by the Contract Administrator.

- a. from the beginning to the ending station(s) of the project between the slope stakes;
- b. area within the defined boundaries of a Construction Permit(s);
- c. material sources;
- d. disposal sites;
- e. designated haul roads;
- f. plant sites;
- g. staging areas;
- h. stockpiling sites; and
- i. other locations identified or approved by the Engineer.

101.84 Proposal Guarantee. The bond or other acceptable security furnished with the Proposal to guaranty that the successful Bidder will enter into the Contract if the Proposal is accepted.

101.85 Quality. Those features that the Department determines are most important to the project. Quality criteria shall include, but may not be limited to, quality of design, constructability, long-term maintenance costs, aesthetics, local impacts, traveler and other user costs, service life, time to construct, and other factors that the Department considers to be in the best interest of the State, and also to minimize unintended deviations from the contract requirements.

101.86 Quality Assurance (QA). A program of planned policies, procedures, detailed responsibilities and systematic actions including inspection, testing and audits of the QC program necessary to provide adequate confidence that the QC, results, and the Project meet the Contract requirements. The Quality Assurance program is the responsibly of the Design-Builder.

101.87 Quality Control (QC). The acts of examining, witnessing, inspecting, checking, and testing of in-process or completed work (including design) and installation activities, to determine conformity with specified requirements and acceptance of construction. Unless otherwise noted, these acts are to be performed by the Design-Builder and their subcontractors. The party doing the “work” primarily performs this process.

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101.88 Qualified Products List (QPL). A list of products prequalified by the Department as meeting the Contract requirements for specified materials to be incorporated into the Work. The list is maintained and updated yearly by the Bureau of Materials and Research.

101.89 Released for Construction (RFC) Documents. Those documents certified to have met all requirements for design quality management and construction and have been stamped and sealed “Released for Construction” by the Design Build Team. The Design Quality Assurance Manager shall certify that these documents are compliant with the Contract Requirements.

101.90 Request for Proposal (RFP). The document issued by the Department asking for Proposals, such as when soliciting for an anticipated Design-Build Contract, and all other documents issued by the department and identified as part of the RFP.

101.91 Request for Qualifications (RFQ). Document issued by the Department as a solicitation for the qualifications of interested Design-Build teams.

101.92 Responsible Bidder. A Bidder that the Department determines has the ability to perform the requirements of the Contract.

101.93 Right-of-Way. A general term denoting land, property, or interest therein, usually in a strip, acquired for or devoted to transportation purposes.

101.94 Right-of-Way Terms:

Limited Access Highway. A highway laid out under the provisions of RSA 230:45 and to which all ingress and egress from abutting tracts of land is prohibited after completion of the work.

Controlled Access Highway. A highway laid out under the provisions of RSA 230:45 and to which ingress and egress from abutting tracts of land may be permitted.

Point of Access. An opening in the right-of-way line through which ingress and egress from the highway to abutting tracts of land may be made. RSA 236:13.

Drive and Entrance. The roadway over which a vehicle must operate for ingress and egress from the highway to abutting tracts of land. RSA 236:13.

101.95 Roadbed. The graded portion of a highway prepared as a foundation for the pavement structure and shoulders.

101.96 Roadside. A general term denoting the area adjoining the outer edge of the roadway. Extensive areas between the roadways of a divided highway may also be considered roadside.

101.97 Roadside Development. Those items necessary for the preservation or replacement of landscape materials and features that may include suitable plantings and other improvements or ground cover to preserve and enhance the appearance and stability of the highway right-of-way or acquired easements.

101.98 Roadway. The portion of a highway within the limits of construction.

101.99 Rock. Where used in these specifications, this term shall be construed to mean igneous, metamorphic,, or sedimentary rock.

101.100 Sieve. U.S.A. Standard Sieve, as defined in AASHTO M 92. Measure percent passing sieve by weight.

101.101 Shoulder. The portion of the roadway contiguous with the traveled way for lateral support of base and surface courses and for accommodation of stopped vehicles, for emergency use.

101.102 Sidewalk. That portion of the roadway primarily constructed for the use of pedestrians.

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101.103 Solid Waste. Material as defined by RSA 149-M.

101.104 Standardized Plant Names. The official Code of Standardized Plant Names of the American Joint Committee on Horticultural Nomenclature.

101.105 State. The State of New Hampshire.

101.106 Statement of Qualifications (SOQ). Document submitted by an interested Design-Build team in response to a RFQ issued by the Department.

101.107 Stipend. A fee that the Department may pay unsuccessful Bidders that submit responsive Proposals and that are otherwise in compliance with the requirements of the RFP.

101.108 Structures. Bridges, conduits, culverts, catch basins, drop inlets, retaining walls, cribbing, manholes, headwalls, end sections, buildings, sewers, service pipes, underdrains, and other features that may be encountered in the Work and not otherwise classed herein.

101.109 Stump. The part of a tree remaining in the earth after the stem or trunk falls or is cut off; a standing tree trunk from which the upper part and the branches have been removed.

101.110 Subbase. Layers of specified material thickness placed on a subgrade to support a base course.

101.111 Subcontractor. An individual, partnership, firm, corporation, or any combination thereof, or joint venture, to whom the Design-Builder sublets any part of the Contract, including design.

101.112 Subgrade. The top surface of a roadbed upon which the pavement structure and shoulders are constructed.

101.113 Substructure. All of that part of a Bridge below the bearings of simple and continuous spans, skewbacks of arches, and tops of footings of rigid frames, together with the footing, piles, backwalls and wingwalls.

101.114 Superintendent. The Design-Builder's authorized representative in responsible charge of the construction work.

101.115 Superstructure. The entire Bridge and approach slabs (if applicable) except the substructure.

101.116 Surcharge. Temporary load placed for the purpose of consolidating the underlying soil.

101.117 Surety. The corporation, partnership, or individual, other than the Design-Builder, executing a Contract Bond or Proposal Bond furnished by the Design-Builder.

101.118 Surface Course. One or more layers of a specified material of designed thickness, to accommodate the traffic load, placed on base courses. The top layer is sometimes called the "wearing course."

101.119 Technical Proposal. The part of a Proposal detailing, among other things, schedule, management, organization, design, project approach and construction of the project.

101.120 Topsoil. The surface layer of soil and sod encountered during construction.

101.121 Traffic. The movement of vehicles, pedestrians, animals, and any other conveyance either singly or together through an area of the project or along a route.

101.122 Traffic Control Device. As defined in the MUTCD, all signs, signals, markings, and devices placed on, over, or adjacent to a street or highway by authority of a public body or official having jurisdiction to regulate, warn, or guide traffic.

101.123 Traffic Lane. See Lane.

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101.124 Traveled Way. The portion of the roadway provided for the movement of vehicles, exclusive of shoulders.

101.125 Wear. The percent of wear of aggregate as determined by the AASHTO T 96 (Los Angeles Abrasion Test). The grading shall be **Grading A** unless otherwise specified.

101.126 Wetland. “An area that is inundated or saturated by surface or ground water at a frequency and duration sufficient to support and that under normal conditions does support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands include, but are not limited to swamps, marshes, bogs, and similar areas.” (NH Code of Administrative Rules, Chapter Wt 101.87, 1997)

101.127 Work. The furnishing of all administrative, personnel, design, engineering, labor, materials, equipment, supplies, installation, construction, supervision, management, testing, verification, documentation, and incidentals necessary or convenient to the successful completion of the Project, and the carrying out of the duties and obligations imposed by the Contract.

101.128 Working Day. Any calendar day, except (1) Saturdays, Sundays, and Contract designated legal Holidays; (2) the period from December 1 to April 1, inclusive; (3) days where conditions identified in the Contract that require the Design-Builder to suspend construction operations; (4) days where inclement weather or other conditions beyond the Design-Builder’s control, prevent prosecution of the scheduled work with at least 75 percent of the normal daily labor and equipment force on the controlling activity for at least 60 percent of the daily hours routinely worked.

Should the Design-Builder prepare to begin work on any day on which inclement weather, or the conditions resulting from the weather, prevent the work from beginning at the usual starting time, and the crew is dismissed as a result, the Design-Builder will not be charged for a working day whether or not conditions change during the day and the rest of the day becomes suitable for construction operations.

101.129 Working Drawings. Working Drawings may be submitted for approval or transmitted for documentation. All submittals to the Department must be certified by the Design Quality Assurance Manager to be compliant with Contract Requirements.

101.130 General Rules of Interpretation.

101.130.1 Referenced Publications. The Design-Builder is responsible for obtaining all manuals, specifications, reference guides, or other publications referenced or indicated by Contract and performing the work in Conformity with the same. Unless a specific date or version is specified, the Design-Builder shall use the most recent version of such publication that existed at the time the final RFP was issued.

The information set forth or referenced in the Project Requirements in the RFP provides basic background project information for use by Bidders. Although the Department believes that the information provided is accurate, Bidders are advised of their responsibility to verify information and to report any errors, omissions, discrepancies, and inconsistencies before making any final determinations regarding the design, pricing, or construction of the Work.

The Design-Builder shall be solely responsible for the Project design, and the Department shall have no liability or obligation as a result of the design work contained in the Reference Documents. The Reference Documents are provided solely for Bidder’s reference and are without representation or warranty by the Department, except where specifically stated otherwise in the Contract.

101.130.2 Cross References. Cross-references are sometimes provided in the Contract and within these provisions. (Example: “For a related provision, see Section ____”). These cross references are provided for convenience only and are not a comprehensive listing of related Sections. The lack of a cross reference or an incorrect reference shall not be interpreted as indicating that there are no related provisions and does not relieve the parties of the obligation to read the Contract as a whole.

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101.130.3 Priority of Conflicting Contract Documents. If the Design-Builder discovers any ambiguity, error, omission, conflict, or discrepancy (“ambiguity, etc.”) related to the Contract Documents that may significantly affect the cost, quality, conformity, or timeliness of the Work, the Design-Builder must comply with 110.03.3. In the case of ambiguity, etc., the following components of the Contract Documents shall control in the following descending order of priority:

- A. Contract Revisions;
- B. Contract;
- C. SOQ and Proposal, to the extent that it meets or exceeds the requirements of the other Contract Documents;
- D. Project Requirements, as defined in the RFQ and RFP;
- E. Special Provisions;
- F. Division 100 General Provisions for Design-Build Projects;
- G. Supplemental Specifications;
- H. 2010 Standard Specifications;
- I. Standard Details; and
- J. Standard Plans.

101.130.4 Interrelationships Between SOQ, RFP, Proposal, and Contract. The SOQ is the document submitted by potential Bidders for the purpose of allowing the Department to determine that the Design-Builder, including the Designer and all other Major Participants, are sufficiently qualified and experienced to satisfactorily complete the Work. By executing the Contract, the Design-Builder covenants that all representations in the SOQ are true and accurate to the best of its knowledge and belief and that it will perform the Work in conformity with the SOQ. The SOQ is a Contract Document.

The RFP is the document from the State consisting of the Contract, Design-Build General Provisions, Project Requirements in the RFP, related Appendices, and other documents specifically included by reference that are advertised for the purposes of transmitting project information to the Bidders, setting forth procedures to be used during the Proposal preparation period, specifying Proposal submittal requirements, establishing the Proposal evaluation process, and specifying procedures and pre-award submittal requirements for award and execution of the Contract.

The Proposal is the submittal by the Design-Builder (then designated a “Bidder”) in response to the RFP. The Proposal represents the Offer by the Design-Builder to perform the Work in accordance with the Contract, its SOQ, and the component of its Proposal known as the Technical Proposal; and for the price submitted in the component of its Proposal known as the Price Proposal. The Proposal is a Contract Document to the extent that it meets or exceeds the requirements of the other Contract Documents. In other words, if the Proposal includes statements that can reasonably be interpreted as offers to provide higher quality items than otherwise required by the Contract or to perform services in addition to those otherwise required, or otherwise contain terms which are more advantageous to the Department than the requirements of the other Contract Documents, the Design-Builder’s obligations hereunder shall include compliance with all such statements, offers and terms. This offer is accepted by the Department upon award of the Contract.

The Contract is the written agreement setting forth the respective rights and obligations of the Department and the Design-Builder from execution of the Contract until the performance of all warranty obligations set forth in the Contract.

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101.130.5 Severability. The invalidity or unenforceability of any particular provision or part thereof of these Design-Build General Provisions shall not affect the remainder of said provision or any other provisions, and these Design-Build General Provisions shall be construed in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

101.130.6 Successors and Assigns. The Department and the Design-Builder respectively bind themselves, their partners, successors, assigns and legal representatives to the other party to this Contract and to partners, successors, assigns of such other party with respect to covenants of this Contract.

101.130.7 Survival. The Design-Builder representations and warranties, the dispute resolution provisions, and all other provisions which by their inherent character should survive termination of the Contract and Final Acceptance, shall survive the termination of the Contract and Final Acceptance.

SECTION 102 -- BIDDING REQUIREMENTS AND CONDITIONS**102.01 Eligibility to Submit a Proposal.**

102.01.1 Basic Requirements. To be eligible to submit a Proposal, prospective Bidders must:

- A. have been short-listed by the Department after submitting an SOQ in the first step of the two-step Best-Value Procurement Process,
- B. not have been debarred or suspended from contracting with the State of New Hampshire, and
- C. not be in default with respect to any outstanding contract with the Department, unless the Department grants written permission to submit a Proposal despite such default.
- D. maintain and demonstrate the intension of completing the contract requirements in good faith.

102.01.2 Conflict of Interest. Any Design-Build team member that has previously provided services or that is currently providing services to NHDOT with respect to the Project may not participate as an equity owner, team member, consultant, or sub consultant of, or to, a Design-Builder for the Project, or have a financial interest in any of the foregoing entities with respect to the Project.

- A. This prohibition includes, without limitation,
 - 1. any agreement with, or other interest involving, third parties who have an interest in the outcome of the Project that is the subject of the Contract;
 - 2. any agreement providing incentives or guarantees of future work on the Project or related matters; and
 - 3. any interest in real property acquired for the Project unless such real property interest is openly disclosed to the Department before the person or entity entered into the Contract.
- B. This section prohibits all conflicts of interest both at the time the contracting party enters into a Contract and during the life of the Contract.
- C. This section prohibits situations involving an actual conflict of interest and those creating an appearance of a conflict of interest. The Department may waive this prohibition or impose curative modifications on the scope of any Contract between the person or entity and New Hampshire DOT to eliminate the conflict or the appearance of a conflict.
- D. A Design-Builder involved in the preparation of information that shall be used or considered in evaluations under the National Environmental Policy Act shall, by virtue of signing the Contract, attest that Design-Builder:
 - 1. has no financial or other interest in, or commitment for, any future contract related to the design or construction of the Project or any of its alternatives,
 - 2. has no financial or other interest in said Project or its alternatives, or any part thereof, and
 - 3. has no other interest which, under applicable law, would prohibit the selection of said Design-Builder to prepare an Environmental Assessment, Environmental Impact Statement, or other environmental documents for the project.
- E. All determinations made under this section shall be at the sole discretion of the Department.

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102.02 Pre-Submittal Requirements for an RFP.

102.02.1 Designation of Bidder Representative. Each Bidder shall provide the Department with the name and address of a representative or key contact person to receive documents, notices, and Amendments hereunder. Each Bidder shall notify Department of any changes to the representative or address for any notices or Amendments to be sent to the Bidder by the Department. Failure to so identify a representative in writing may result in the Bidder failing to receive Amendments or other important communications from the Department, for which the Department will not be responsible.

102.02.2 Examination of Plans, Specifications, Special Provisions, RFP, and Project Site. The Bidder is expected to examine carefully all documents included in the RFP, any amendments by Addendum, the physical Project Site, and FTP site before submitting a Proposal. The Bidder is responsible for all site conditions that should have been discovered had a reasonable site investigation been performed. The submission of a Proposal will be considered conclusive evidence that the Bidder is satisfied with the conditions to be encountered in performing the requirements of the proposed Contract. It will be assumed that the Bidder has also investigated and is satisfied with the sources of supply for all materials.

Whenever boring logs or other records of subsurface investigations obtained by the Department are available for a Bidder's inspection, it is understood that these records have been obtained with reasonable care and recorded in good faith. The information is made available to Bidders so all may have access to the identical subsurface information available to the Department and is not intended as a substitute for the personal investigations, interpretations, and judgment of the Bidders.

Boring logs and other subsurface investigation records are available for inspection at the office of the Department's Bureau of Materials & Research, prior to the bid opening by appointment with 72 hours advance notice.

There is no warranty or guarantee, either expressed or implied, that the conditions indicated by such investigations or records are representative of those conditions existing throughout such areas, or any part thereof, or that unforeseen conditions will not occur, or that materials other than, or in proportions different from those indicated, will not be encountered.

The word "rock" or the word "ledge" or the symbol for rock or ledge wherever used on the Plans shall be interpreted to mean only that rock may exist at the indicated elevations.

The Department will not be bound by any statement or representation concerning conditions or description of work unless they are included in the Contract. Oral explanations or instructions given before the award of the Contract by Department employees or agents will not be binding.

Any request for explanation of the meaning or interpretation of the RFP shall be submitted at least five (5) days before the hour and date set for the submission of Technical and Price Proposals to allow a reply to reach all Bidders before submission of their Proposal. Interpretations or explanations made by the Department in response to such requests will be issued as an Addendum to the RFP. All revisions or corrections to the Request for Proposal will be made by a written Addendum posted on line at www.nh.gov/dot/projects/bedford13527/index.htm or sent by either certified mail, Email with return receipt or telefacsimile to prospective Bidders. All Addenda shall be acknowledged by the Bidder.

Bidders shall also be solely responsible for investigating any and all conditions that may in any way affect the amount or nature of its Proposal or the performance of the Work if Bidder enters into the Contract with the Department. The Technical Proposal Submission Form (Form A) includes an acknowledgement that the Bidder has received and reviewed all materials posted thereon. Failure of the Bidder to so examine and inform itself shall be at the Bidder's sole risk, and no relief for error or omission will be provided by the Department.

102.02.3 Communication before Proposal Opening.

102.02.3.1 Questions from Bidders. Bidders shall direct questions, including requests for explanations or interpretation, in writing to the Department Representative designated in the Project Requirements in the RFP. Any such request regarding the RFP or the Project must be submitted in writing to the Department Representative no later than the deadline for questions set forth in the Project Requirements in the RFP, provided that requests in

connection with an Amendment must arrive no later than five (5) Days after issuance of the Amendment. Each Bidder must make itself available to the Department to discuss any matters it submits to the Department under this Section.

102.02.3.2 Bidder's Duty to Notify Department if Ambiguities Discovered. During the preparation of the Proposal, Bidders shall not take advantage of any ambiguity, error, omission, conflict, or discrepancy ("ambiguity, etc.") contained in the RFP, Reference Documents, site conditions, or any other information that may significantly affect the cost, quality, Conformity, or timeliness of the Work. Intentions to manipulate or deceive the Department to gain significant advantage by non-disclosure of such ambiguities will not be allowed. If a Bidder discovers any such ambiguity, etc., they must notify the Department Representative immediately in writing.

Requests for clarification or interpretation must specifically reference the section and page number of the RFP at issue, unless such request is of general application. Requests shall be clearly marked with the Project Name and Identification Number in the Subject field of the email, with Attention to the Department Representative referenced in the Project Documents. Phone requests will not be accepted. Responses to written questions received will be provided to all Bidders as previously described. A final set of questions and answers will be compiled and distributed to all Bidders no later than 5 days prior to the Proposal due date. If the Department determines, in its sole discretion, that such interpretation or clarification requires a change in the RFP Documents, the Department will prepare and issue an Amendment. (see section: 102.02.3.3 RFP Amendments)

Inquiries shall not go to any Department staff other than the Department Representative, or to any Department consultant. The Department has no duty to respond to any such inquiries and the Department will not be responsible for any responses from any source other than the Department Representative. Furthermore, the Department will not be bound by, and Bidder shall not rely on, any oral communication or representation regarding the RFP Documents, or any written communication except to the extent that it is an Amendment to the RFP and is not superseded by a later Amendment to the RFP.

102.02.3.3 RFP Amendments. The Department reserves the right to revise the RFP Documents. Such revisions, if any, shall be announced by Amendments. Amendments to the RFP will be e-mailed to each Bidder and posted on the Project website. If any Amendment includes changes significantly impacting the RFP, as determined in the Department's reasonable discretion, the Department may set a new Proposal Due Date. The announcement of such new date, if any, shall be included in the Amendment. In any event, the Proposal Due Date shall not occur within five (5) Days after the issuance of the last Amendment. Bidder must expressly acknowledge in its Technical Proposal Submission Form (Form A) receipt of all Amendments. Failure to acknowledge receipt of all Amendments shall cause the Proposal to be deemed non-responsive to the RFP and be rejected without further evaluation. The Department reserves the right to hold group or one-on-one meetings with each Bidder to discuss any Amendments or response to requests for clarifications.

102.02.3.4 Changes in Bidder's Organization. If a Bidder wishes to change its organization and business structure from that described in the SOQ submitted by Bidder in response to the Department's RFQ, the Bidder shall obtain written approval of the change from the Department prior to submitting its Proposal. This includes any changes in the form of organization of Bidder and Major Participants (including additions, deletions, and reorganization). Any such request shall be addressed to the Department Representative at the address set forth in the Project Requirements in the RFP, accompanied by the information specified for such entities or individuals in the RFQ. The Department is under no obligation to approve such requests and may approve or disapprove a portion of the request or the entire request at its sole discretion.

102.02.3.5 Ex Parte Communications. During the Request for Proposals process and continuing until award of the Contract or cancellation of the RFP, no Bidder shall have any ex parte communications regarding the RFP Documents with the Department's staff, including any member of the RFP evaluation committee or consultant hired to assist with the development of the RFP Documents, except for communications expressly permitted by the RFP Documents. The Department will have the right to disqualify any Bidder engaging in such prohibited communications, and may withdraw its short-listing of the Bidder.

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102.03 Proposal Submittal Requirements.

102.03.1 Submittal of Proposals.

102.03.1.1 Location and Time. Proposals must be received at the location and time specified in the Project Requirements in the RFP.

102.03.1.2 Separate Packages. The Proposal shall be submitted in separate sealed packages as specified in the Project Requirements in the RFP. Proposals received after the time due will be rejected without consideration or evaluation and shall be returned unopened.

102.03.2 Proposal Format and Content.

102.03.2.1 Proposal Organization. The Proposal shall be organized as listed below. Each item listed shall be separately indexed and/or packaged, clearly titled, and identified as described below. Blank copies of Forms A and E are included in Appendix A.

Proposal Components	
Technical Proposal Package	
Technical Proposal Submission Form	Form A (separately packaged)
Letter(s) Approving Changes in Bidder's Organization (if applicable)	Two (2) pages maximum each
Technical Proposal	
11" x 17" Plan Set	
Preliminary Schedule	
Approved Response Summary for ATC #__ Forms	
Design Quality Management Plan Outline	
Construction Quality Management Plan Outline	
CD-ROM with electronic copy of Technical Proposal and Plan Set	
Proposal Guaranty Package	
Proposal Guaranty	Form C (separately sealed)
Price Proposal Package	
Price Proposal	Form D (hard copy and electronic copy)

102.03.2.2 Technical Proposal Package.

102.03.2.2.1 Technical Proposal Submission Form. The Technical Proposal Package shall include the Technical Proposal Submission Form (Form A). Attach to the Technical Proposal Submission Form evidence of the authorization to execute and deliver the Proposal and Contract, and identify its authorized representative.

102.03.2.2.2 Letter(s) Approving Changes in Bidder's Organization. If the Bidder's organization has changed since submission of its Statement of Qualifications, the Bidder shall specifically describe such changes

and include a copy of the Department's approval letter(s) described under 102.02.3.4 of the Design-Build General Provisions.

102.03.2.2.3 Format. The Technical Proposal shall contain concise written material and drawings that enable a clear understanding and evaluation of both the capabilities of the Bidder and the characteristics and benefits of the Proposal. Legibility, clarity, and completeness of the technical approach are essential. Bidders shall organize the Technical Proposal so that the Department can easily separate and evaluate each criterion in the order shown in the Project Requirements in the RFP.

The purpose of the Technical Proposal is to demonstrate the Design-Builder's understanding of the Project and its approach to address technical responsiveness requirements and scored criteria listed in the Project Requirements in the RFP. The Technical Proposal shall contain sufficient detail to allow the Department to clearly understand and evaluate both the capabilities of the Bidder and the characteristics and benefits of the proposed work.

The Technical Proposal shall conform to the formatting requirements in the RFP:

102.03.2.2.4 Content. To assist the Bidders in preparing Proposals, the required contents of, as well as forms required for, the Proposal are listed in the Project Requirements in the RFP.

102.03.2.3 Proposal Guaranty Package. The Price Proposal must be accompanied by a Proposal Guaranty that complies with all the requirements of the RFP, unless noted otherwise. The Proposal Guaranty will be considered as accompanying the Price Proposal so long as the Proposal Guaranty is submitted to the same Department Representative as the Technical and Price Proposals prior to the opening of the Price Proposals.

The Proposal Guaranty must be:

- A. in the amount of five percent (5%) of the Price Proposal;
- B. made payable to the "Treasurer – State of New Hampshire"; and
- C. one of the following types: a Bond conforming to the next paragraph, a cashier's check, a certified check, or a United States Postal money order.

Bonds must:

- A. be completed in a form acceptable to the Department, and
- B. be issued by a bonding company licensed to transact business in the State of New Hampshire, and
- C. be issued by a bonding company listed on the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies", as published by the United States Department of the Treasury, Fiscal Service, Circular 570, and
- D. not contain any irregularities. In the event that any irregularities are contained in the Proposal guaranty, the Bidder will have seven (7) calendar days from the time the Price Proposals are opened to correct the irregularities. If such irregularities are not corrected to the satisfaction of the Department, the Proposal will be rejected.

102.03.2.4 Price Proposal Package.

102.03.2.4.1 Content. As part of Form D, the Bidder is required to indicate the Lump Sum Price offered by Bidder to perform the work described in the Technical Proposal, which is referred to herein as the

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“Price.” The term “Price Proposal,” as used herein, means Form D and other documentation identified in 102.03.2.1 submitted by each Bidder.

102.03.2.4.2 DBE Submittal Requirements. The Bidder shall submit Form E, if applicable, with the Price Proposal, identifying each of the DBE firms used to meet the DBE goal specified in the Project Requirements in the RFP.

102.03.2.5 Effects of Signing and Submission of Proposals. Each Proposal shall be executed on behalf of the Bidder by its authorized representative(s). The signing of the Technical Proposal Submission Form (Form A) and the delivery of a Proposal represents (a) an offer by the Bidder to perform the Work for the Price submitted in the Price Proposal, within the time(s) specified and in accordance with all provisions of the Contract Documents and (b) the Bidder’s agreement to all provisions of the RFP and Contract governing requirements and procedures applicable through execution of the Contract.

By signing the above referenced Technical Proposal Submission Form and by delivering the Proposal, the Bidder makes the following affirmative representations.

- A. The Bidder has reviewed all documents and undertaken all investigations that could significantly impact the cost, timeliness, quality, or performance of the Work. Specifically, the Bidder has:
 - 1. carefully examined the RFP and Contract Documents and all documents referenced therein including any electronic documentation provided,
 - 2. carefully examined all available reports and data related to subsurface conditions,
 - 3. become familiar with all applicable Laws,
 - 4. visited the Site and undertaken field and site investigation, and
 - 5. correlated the information obtained from the above examinations and investigations.
- B. The Bidder has given the Department written notice of all errors, omissions, or discrepancies discovered in the RFP and/or Contract Documents.
- C. The Bidder has determined that the RFP and Contract are generally sufficient to convey an understanding of all terms and conditions that could significantly impact the cost, timeliness, quality, or performance of the Work.
- D. The Bidder provides all federally required certifications as set forth in Appendix A to the Design-Build General Provisions.

102.03.2.6 Withdrawal of Proposals Before the Time Specified for Submission of Proposals. A Bidder may withdraw a Proposal after Delivery, provided the request for such withdrawal is made in writing or in person before the time set for Submission of Proposals in the RFP. The Bidder may revise and resubmit a Proposal so withdrawn before the time specified for Submission of Proposals.

102.04 Alternative Technical Concepts (ATCs). As identified in the Project Requirements in the RFP, the Department will use the ATC process described below to provide Bidders with the opportunity to propose changes to the Project Requirements that are equal or better in quality or effect as determined by the Department, at its sole discretion.

All ATCs will be confidential between the Department and the Bidder submitting ATCs and will remain confidential throughout the proposal process until the public opening of the Technical Scores and the Price Proposals. Bidders who violate this confidentiality requirement may be disqualified and not allowed to submit a

Proposal at the sole discretion of the Department. ATCs shall be limited to Project Requirements in the RFP other than those listed in the Technical Proposal Responsive Requirements identified in the Project Requirements.

102.04.1 Submittal of ATCs. No ATCs will be accepted prior to issuance of the final RFP. ATCs must be submitted to the Department Representative by the time and date specified in the Project Requirements in the RFP. Each ATC submittal shall include five (5) individually bound copies and shall include the following:

- A. Description: A detailed description and schematic drawings of the configuration of the ATC or other appropriate descriptive information (including, if appropriate, product details [i.e., specifications, construction tolerances, special provisions] and a traffic operational analysis);
- B. Usage: Where and how the ATC would be used on the Project;
- C. Deviations: References to requirements of the RFP documents that are inconsistent with the proposed ATC, an explanation of the nature of the deviations from said requirements, and a request for Approval of such deviations;
- D. Analysis: An analysis justifying use of the ATC and why the deviations from the requirements of the RFP documents should be allowed;
- E. Impacts: Discussion of potential impacts on vehicular and pedestrian traffic, environmental impacts identified on appropriate environmental documents, community impact, safety and life-cycle Project impacts, and infrastructure costs (including impacts on the cost of repair and maintenance);
- F. History: A detailed description of other projects where the ATC has been used, the success of such usage, and names and telephone numbers of project owners that can confirm such statements; and
- G. Risks: A description of added risks to the Department and other persons associated with implementing the ATC.
- H. Warranty: A description of any applicable warranties that apply and how they compare and affect the typical warranty.

102.04.2 Department's Review of ATCs. The Department will review each ATC submitted. If an ATC is summarily approved or not approved, the Department's comments will inform the Bidder that its technical concept appears to be generally acceptable, or the Department will identify areas in which the approach appears to be incompatible with the Project Requirements in the RFP. If the Department needs more information to determine whether or not the ATC will be approved or not approved, the Department will submit written questions to the Bidder and/or request a one-on-one meeting to better understand the details of the ATC. The Department may conditionally approve an ATC based on required revisions to a portion or portions of the ATC.

The Department will make one of the following determinations and provide it to the Bidder with respect to each properly submitted ATC.

- A. The ATC is approved.
- B. The ATC is not approved.
- C. The ATC is not approved in its present form, but is approved subject to satisfaction, in the Department's sole judgment, of specified conditions.

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- D. The submittal does not qualify as an ATC, but may be included in the Proposal without an ATC (i.e., the concept complies with the RFP requirements).
- E. The submittal does not qualify as an ATC and shall not be included in the Proposal.
- F. Decision on the ATC is pending receipt of additional information and/or one-on-one meeting.

Approval of an ATC will constitute a change in the specific requirements of the Contract Documents associated with the approved ATC. Should the Design-Builder be unable to obtain required approvals for any ATC incorporated into the Contract Documents, or if the concept otherwise proves not to be feasible, the Design-Builder will be required to conform to the original RFP requirements. Each Bidder, by submittal of its Proposal, acknowledges that the opportunity to submit ATCs was offered to all Bidders, and waives any right to object to the Department's determinations regarding acceptability of ATCs.

102.04.3 Incorporation of ATCs into Proposal. A Bidder may incorporate zero, one, or more pre-approved ATCs into its Proposal, including conditionally approved ATCs. If the Department responded to an ATC by identifying conditions to approval, the Bidder may not incorporate such ATC into its Proposal unless all conditions have been met. Copies of the Department's ATC approval letters for each incorporated ATC shall be included in the Proposal as specified in the Project Requirements in the RFP. Proposals with or without ATCs will be evaluated against the same technical evaluation factors, and the inclusion of an ATC, including an ATC that provides technical enhancements, may or may not receive a higher technical rating.

The Proposal Price must reflect all incorporated ATCs. Except for incorporating approved ATCs, the Proposal shall not otherwise contain exceptions to or deviations from the requirements of the RFP Documents.

102.05 Familiarity with Laws. The Bidder is required to have made itself familiar with all Federal and State laws and all local by-laws, ordinances, and regulations which in any manner affect those persons engaged or employed to perform the work or affect the materials or equipment used in the Contract or affect the conduct of the work, and no plea of ignorance or misunderstanding will be considered. If the Bidder shall discover any provision in the Contract which is in conflict with any such law, by-law, ordinance, or regulation, the Department shall be informed forthwith in writing.

102.06 Public Opening of Proposals. Price Proposals and Technical Scores will be opened and read publicly at the time and place indicated in the RFP. The Department will thereafter review the successful Proposal and make a determination that the Proposal is responsive to the RFP and meets the conditions for Award.

102.07 Materials Statement. The Design-Builder shall, when requested, furnish a complete statement of the origin or supplier of materials to be used in the construction of the work, together with samples to be tested for conformance with the Contract provisions.

102.08 Non-Collusive Bidding Certification. Every Proposal submitted to the Department shall contain the following statement affirmed by the Bidder as true under the penalties of Law. This Certification, on Department forms, shall be signed by the Bidders and submitted with the Price Proposal.

Non-Collusive Bidding Certification:

By submission of this Proposal, each Bidder and each person signing on behalf of any Bidder, certifies as to its own organization, under penalty of perjury, that to the best of their knowledge and belief:

1. The prices in this Bid Proposal have been arrived at independently without collusion, consultation, communication, or agreement with any other Bidder or with any competitor for the purpose of restricting competition.

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2. Unless required by law, the prices that have been quoted in this Bid Proposal have not been knowingly disclosed and will not knowingly be disclosed by the Bidder, directly or indirectly, to any other Bidder or competitor prior to opening of Proposals.
3. No attempt has been made or will be made by the Bidder to induce any other person, partnership, or corporation to submit or not to submit a proposal for the purpose of restricting competition.
4. The signers of the Proposal hereby tender to the Department this sworn statement that the named Design-Builder has not, whether directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action to restrain free competitive bidding in connection with this Proposal.
 - A. A Bid Proposal will not be considered for award nor will any award be made where there has not been compliance with the statements in the certification above.
 - B. The fact a Bidder (1) has published price lists, rates, tariffs covering items being procured, (2) has informed prospective customers of proposed or pending publication of new or revised price lists for such item, or (3) has sold the same items to other customers at the same prices being bid, does not constitute a disclosure within the meaning of Part 1 of the certification above.

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SECTION 103 – EVALUATION OF PROPOSALS AND AWARD AND EXECUTION OF CONTRACT

103.01 Escrow of Proposal Documents.

103.01.1 Delivery of Price Proposals to Document Depository Facility. A Department representative will deliver all Price Proposal envelopes unopened to a secure facility or other document storage facility.

103.01.2 Duration of Escrow. The Price Proposals will remain in a secure facility until completion of the scoring process for the Technical Proposals as described in 103.02.2. Bidders shall not be allowed access to the Price Proposals under any circumstances.

103.01.3 Release of Price Proposals from Escrow. Upon completion of the scoring of all Technical Proposals, the Department Representative shall be authorized to release all Price Proposals upon notification stating that scoring is complete. Price Proposals will be opened as described in 103.03.

103.01.4 Cost and Escrow Instruction. The cost of the secure document storage facility will be borne by the Department. The Department will provide instructions to the document facility consistent with 103.01.

103.01.5 Escrowed Proposal Documents (EPDs) for the Successful Bidder. The Successful Bidder shall, within ten (10) Days of receiving the Letter of Intent to Award, assemble and deliver documentation (the “EPDs”) containing information regarding the Bidder’s assumptions made in determining the scope of work and calculating the Price Proposal and meeting all requirements of 103.03. The Bidder shall submit its EPDs in hard copy and shall also provide electronic copies. The EPDs shall include detailed information as required by these Design-Build General Provisions, including information from all Subcontractors identified in the Proposal and any other potential subcontractors who provided data upon which the Proposal is based.

103.01.6 The Department’s Acknowledgment. The Department acknowledges that the Bidder considers that the EPDs constitute trade secrets or proprietary information. This acknowledgment is based upon Department’s understanding that the information contained in the EPDs is not known outside each Bidder’s business, is known only to a limited extent and by a limited number of employees of Bidder, is safeguarded while in Bidder’s possession, and may be valuable to Bidder’s construction strategies, assumptions and intended means, methods and techniques of design and construction. Except as set forth in the Contract or as required by applicable Law, the Department acknowledges that the EPDs will remain in the possession of the Escrow Agent at all times and will at no time be received by, or become the property of, the Department.

103.02 Evaluation of Technical Proposals. Technical Proposals will be evaluated using a two-step process by the Department’s Technical Proposal Responsiveness Committee and the Department’s Technical Proposal Scoring Committee.

The Technical Proposal Responsiveness Committee will consist of technical persons from within the Department. The Technical Proposal Scoring Committee will consist of technical and nontechnical persons within the Department. The Department reserves the right to make Committee member substitutions at its discretion.

First, the Technical Proposal Responsiveness Committee will examine Proposals in accordance with 103.02.1 and make a determination as to whether each Technical Proposal is responsive. Second, responsive Technical Proposals will be scored as specified in 103.02.2.

103.02.1 Responsiveness Evaluation. The Technical Proposal Responsiveness Committee will determine whether Technical Proposals are responsive and communicate said determination to the Department Representative.

Within ten (10) Days of the date of submittal of Proposals, the Department Representative will send by: e-mail certified mail(return receipt requested), overnight mail, courier, or fax with confirmed receipt, a written “Notice of Technical Proposal Responsiveness” to all Bidders that submitted Proposals. The Notice shall state, as applicable, that:

- A. as of the date of said Notice, the Technical Proposal is responsive;
- B. the Technical Proposal fails to comply with the Technical Proposal Responsiveness Requirements set forth in the Project Requirements in the RFP that must be cured within five (5) Days; or
- C. the Technical Proposal contains Non-curable Technical Proposal Defects as provided in 103.02.1.1 and is rejected as non-responsive.

Said Notice may consist of more than one communication to allow Bidders more time to cure defects. The Technical Proposal shall be considered finally submitted upon expiration of the responsiveness evaluation.

Proposals considered responsive pursuant to this Section may still be rejected as non-responsive at a later date if the Bidder fails to satisfy such additional responsiveness requirements as are specified elsewhere in this Section. The Department's determination of responsiveness in no way relieves the Bidder from meeting all contract requirements listed as part of this contract.

103.02.1.1 Non-curable Technical Proposal Defects. The Department will reject Proposals as non-responsive if any one of the following occurs:

- A. The Technical Proposal is not properly delivered.
- B. The Department has substantial evidence of collusion by the Bidders.
- C. The Bidder adds any provision reserving the right to accept or reject an Award or a Contract.
- D. The Bidder fails to provide a completed and signed Form A.
- E. The Bidder fails to cure the Technical Proposal Responsiveness Requirements as set forth in the Project Requirements in the RFP.

103.02.1.2 Curable Technical Proposal Defects. Bidders must cure, to the satisfaction of the Department, all Curable Technical Proposal Defects identified in the Notice of Technical Proposal Responsiveness within five (5) Days of the date of receipt of such Notice. Failure to so cure all such Curable Technical Proposal Defects will result in forfeiture of Bidder's Proposal Guaranty and forfeiture of any claim to the Stipend. Curable Technical Proposal Defects include, but are not limited to, the following:

- A. The Bidder fails to provide all the requested forms, excluding Form A;
- B. The Bidder fails to meet all of the Technical Proposal Responsiveness Requirements as outlined in the Project Requirements in the RFP;
- C. The Technical Proposal is not in substantial compliance with the requirements of the Project Requirements in the RFP, the Division 100 - General Provisions for Design-Build Projects, or, in the Department's sole discretion, the intent of the Standards and publications incorporated by reference in 106.12.2 – Quality Standards; and/or
- D. The Bidder fails to indicate the Bidder's choice where the RFP clearly requires a choice.

103.02.2 Technical Proposal Evaluation. Each responsive Technical Proposal will be interpreted and evaluated based on the level of commitment provided by the Bidder. Tentative commitments will be given no consideration. For example, phrases such as "we may" or "we are considering" will be given no consideration in

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the evaluation process since they do not indicate a firm commitment. Descriptive comments such as “High Quality”, or “Timely” or “Durable” should be quantified for proper evaluation.

103.02.2.1 Requests for Clarification, Oral Presentations, and Discussions. The Department may issue one or more requests for clarification to the individual Bidders. The Department may also schedule oral presentations and/or discussion meetings with each Bidder on a one-on-one basis for the purpose of enhancing the Department’s understanding of their Technical Proposals and obtaining clarifications of the terms contained in the Technical Proposals. The Department may at any time request additional information or clarification from the Bidder or may request the Bidder to verify or certify certain aspects of its Technical Proposal. The scope, length, and topics to be addressed shall be prescribed by, and subject to the discretion of, the Department. At the conclusion of this process, Bidders shall be required to submit written confirmation of any new information and clarifications provided during an oral presentation. If required, oral presentations shall be scheduled at a later date. Upon receipt of requested clarifications and additional information as described above, if any, the Technical Proposals will be re-evaluated to factor in the clarifications and additional information.

103.02.2.2 Scoring Administrator. A Scoring Administrator will chair and facilitate the Technical Proposal Scoring Committee described in 103.02.2.3. The Scoring Administrator will not score any technical criteria Categories. The Scoring Administrator shall conduct the scoring procedure as specified in 103.02.2.4. At the end of the scoring procedure, the Scoring Administrator will supply the Final Score for each Technical Proposal at the public opening of Price Proposals and Scores.

103.02.2.3 Technical Proposal Scoring Committee. Each Category will be scored by four (4) to eight (8) Committee members who are knowledgeable in that particular area. The Department reserves the right to change scoring assignments to better match the Items with Committee expertise. The Categories to be scored and allocation of total points by Category are described in the Project Requirements in the RFP.

103.02.2.4 Score Sheets. The Department will prepare standardized score sheets for each of the Technical Proposal Categories, based upon the Proposal Submittal Requirements and the Proposal Evaluation Criteria described in the RFP. The information provided to Bidders within the RFP is for general guidance regarding what is important to the Department and other stakeholders. The Category sub-scoring criteria listed in the RFP are not necessarily in priority order and no inference of relative importance is intended.

103.02.2.5 Technical Proposal Scoring Procedure. Each evaluation criterion in the Project Requirements of the RFP has an assigned maximum number of points that demonstrates its relative importance. The total Technical Proposal score to each Bidder will be (a) the sum of the scores that each Scoring Committee member assigns to that Bidder, (b) divided by the number of Scoring Committee members, rounded to the nearest one hundredth of a point. The figure derived from the preceding sentence is to be converted to a point scale in order to represent the Technical Proposal weighting described in the RFP with the product being rounded to the nearest one hundredth of a point.

The entire scoring procedure, including Committee meetings and scoring materials will be strictly confidential until after the public opening of Price Proposals, Technical Scores, and award of a contract. The identities of the Committee members will remain confidential even after award of Contract.

103.02.2.6 Notice of Score. The Final Scores will be known only to the Scoring Administrator and/or the Assistant Scoring Administrator until after the public opening of Price Proposals. **103.02.2.7 Review of Scores.** After Price Proposal opening and responsiveness check, any of the Bidders may review the Scoring Administrator’s materials, including summaries of scores and comments. The Department will provide a copy by mail or fax to Bidders (only) upon request.

103.03 Price Proposal Opening. Unless changed by Amendments, the Price Proposals will be opened and the Lump Sum Prices will be publicly read by the Department at the location, time, and date specified in the Project Requirements in the RFP. Bidders, their authorized agents, and other interested parties are invited to attend.

The public reading of the price and computation of overall Best-Value ratings at the opening does not constitute a final determination by the Department of whether the Price Proposal is responsive. The Department may refuse to read Price Proposals that are obviously non-responsive.

103.03.1 Price Proposal Responsiveness.

103.03.1.1 Non-Curable Price Proposal Defects. The Department will reject Price Proposals as non-responsive for any of the following reasons:

- A. The Bidder failed to properly deliver the Price Proposal;
- B. The Bidder failed to provide a completed and signed Form D;
- C. The Bidder failed to submit a Price Proposal Guaranty conforming to the Proposal Requirements;
- D. The Price Proposal contains any provision reserving the right to accept or reject an Award or a Contract or otherwise contains any unauthorized, conditional, or alternate bidding language; or
- E. The Bidder fails to comply with any other provision in the Project Requirements that the RFP expressly indicates will cause Price Proposal rejection.

103.03.1.2 Curable Price Proposal Defects. The Bidder must cure, to the satisfaction of the Department, all Curable Price Proposal Defects within twenty-four (24) hours of the commencement of the Price Proposal Opening. Failure to cure all Curable Price Proposal Defects within said twenty-four (24) hour time period will result in forfeiture of Bidder's Proposal Guaranty and any claim to the Stipend. Curable Price Proposal Defects include, but are not limited to, the following:

- A. Failure to provide properly completed DBE Price Proposal Form(s) (if required) or failure of the information in such form(s) to correspond precisely with the information in the "Technical Proposal DBE Compliance Review Form(s)" submitted with the Bidder's Technical Proposal; and
- B. Failure to submit prices or signatures in ink or other non-erasable substance.

103.03.2 Computation of Best-Value Rating. At the Price Proposal Opening, the Department will publicly announce the Raw Technical Score of each Bidder's Technical Proposal and the corresponding Adjusted Technical Score. The Department will publicly divide each Bidder's Price by the corresponding Adjusted Technical Score of each Bidder. The result shall be the overall Best-Value rating for each Proposal.

The formula for calculating the overall Best-Value rating is:

$$BV = \frac{P}{ATS}$$

Where:

BV = Overall Best-Value

P = Lump Sum Price

ATS = Adjusted Technical Score, expressed as a four digit decimal

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The Raw Technical Score will be calculated by averaging the score sheets from each Evaluator. The Raw Technical Score will then be converted to a point scale identified in the RFP. The Bidder's Adjusted Technical Score will be calculated by adding the converted points from the Raw Technical Score to the minimum Responsiveness Score identified in the RFP. The Adjusted Technical Score will then be divided by 100 to be expressed as a four digit decimal. Example: Based upon a 25 point scale, if a Bidder receives a Raw Technical Score of 84.68 points out of a possible 100 points, this would be converted to 21.17 points. When added to a minimum Responsiveness Score of 75.00, the Bidder's Adjusted Technical Score for use in the above Best Value formula would be 96.17, which will be expressed as 0.9617 for the formula in 103.03.2.

103.03.3 Determination of Successful Bidder. The Proposal with the lowest overall Best-Value rating will be the Apparent Successful Proposal and its Bidder the Successful Bidder, contingent on the Department's determination that the Price Proposal meets the conditions for Award.

103.03.3.1 Return of Proposal Guaranty. Proposal Guaranties will be returned within five (5) Days following Price Proposal Opening, except that the Proposal Guaranties from the two lowest overall Best-Value ratings from responsible Bidders will be retained until Contract Execution or rejection of all Proposals.

103.04 Award of Contract. Within twenty (20) Days of the opening of the Price Proposals, the Department will mail or fax (with confirmation of receipt) a Letter of Intent to Award the Contract (with Governor and Council Approval) to the Successful Bidder and letters indicating such intent to all other Bidders. Three (3) originals of the Contract shall be included with said Letter. Said Letter shall also indicate that the Department will award the Contract to the Successful Bidder if said Bidder fulfills the conditions stated in the letter.

As a condition to award, the successful Bidder shall deliver the following required documents to the Department concurrently with the executed copies of the Contract:

- A. Evidence of authorization to execute the Contract, in the form of a certified resolution of the governing body of the Bidder expressly stating such body's authorization to execute the Contract and, if the Bidder is a partnership, joint venture, unincorporated association or limited liability company, of the governing bodies of the entity's partners or members;
- B. The insurance policies, endorsements and/or certificates required under 107;
- C. A Contract Bond in the form attached as Form B issued by the Surety listed in the RFP, or an equivalent surety meeting the requirements stated in 103.08;
- D. Evidence of Availability of a Warranty Bond;

103.04.1 Successful Bidder's Obligations. Within ten (10) Days of receipt of the Letter of Intent to Award, the Successful Bidder must comply with all the provisions of this Section and all additional conditions stated in the letter.

103.04.1.1 Fulfillment of Award Conditions. The Successful Bidder must fulfill all conditions set forth in the Letter of Intent to Award. Unless otherwise stated in said Letter, all items shall be delivered to the Department Representative.

103.04.1.2 Bidder's Acknowledgement. The Bidder acknowledges that, if awarded the Contract, it shall have full responsibility for the design and construction of the Project and for furnishing the final design and construction documents.

The Bidder further acknowledges that it has diligently reviewed and verified the Department-Supplied Information and the Project Requirements in the RFP for errors, omissions, inconsistencies or other

defects and has incorporated into its Price Proposal all costs associated with correction of any such errors, omissions, inconsistencies and/or other defects.

The Bidder specifically acknowledges and agrees that:

1. The Department-supplied information is preliminary and conceptual in nature;
2. The Design-Builder will be responsible for correcting any errors, omissions and defects in the Department-Supplied Information through the design and/or construction process;
3. The Department shall have no liability for errors, omissions, and defects in the Department-Supplied Information, notwithstanding the Department's obligations for Differing Site Conditions, and;
4. The Department shall not be responsible or liable in any respect for any loss, damage, injury, liability, cost, expense or cause of action whatsoever suffered by the Bidder, its employees, agents, officers or subcontractors or any other persons or entities for whom the Bidder may be legally or contractually responsible, by reason of any use of any information contained in the Department-Supplied Information or any action or forbearance in reliance thereon, except as may be provided in the Contract. The Bidder further acknowledges and agrees that:

if and to the extent Bidder or anyone on Bidder's behalf uses any of said information in any way, such use is made on the basis that Bidder, not the Department, has approved of such use and information and is responsible for said information; and

Bidder is capable of conducting and is obligated hereunder to conduct any and all studies, analyses and investigations as it deems advisable to verify or supplement said information, and that any use of said information is entirely at Bidder's own risk and discretion.

103.04.1.3 Execution of the Contract. The Successful Bidder must properly sign all originals of the Contract and properly deliver them to the Department Representative.

103.04.1.4 Extension of Time to Fulfill Conditions and Execute Contract. The Successful Bidder may request in writing, and the Department approve an extension of time for fulfillment of Award Conditions and execution of the Contract by the Successful Bidder for good cause shown, provided said extension is in the best interest of the Department.

103.04.1.5 Failure to Fulfill Conditions or Execute Contract. Unless extended pursuant to 103.04.1.4, failure of the Successful Bidder to fulfill all conditions set forth in the Letter of Intent to Award or to execute the Contract will result in cancellation of the conditional award to the Successful Bidder and the forfeiture of the Proposal Guaranty and any claim to a Stipend or other compensation.

The Department shall then take any action that is in the best interest of the State as determined by the Department including awarding the Contract to the Bidder with the next lowest overall Best-Value rating or rejecting all Proposals and amending the RFP and/or re-advertising the Work. Any Bidder failing to fulfill the Award Conditions or execute the Contract shall be prohibited from submitting a new proposal for the same work in the event that the Work is re-advertised.

103.04.2 Final Determination of Proposal Responsiveness/Award of Contract. Within ten (10) Days of receipt of all items identified in the Letter of Intent to Award and the executed original Contracts, the Department will make a final determination of whether the Proposal of the Successful Bidder is responsive and, if responsive, award the Contract to the Successful Bidder. Award may be made after said ten (10) Day period provided in this Section if the Successful Bidder agrees to accept such Award. The Successful Bidder will be notified of Award in

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writing. Until Award of the Contract, the Department reserves the right to reject any or all Proposals, to waive technicalities, or to advertise for new proposals, if the best interests of the Department will be promoted.

103.04.3 Execution of Contract by the Department. The Department will execute the Contract within fourteen (14) Days of the date of execution by the Successful Bidder. Upon execution of the Contract by the Department and the Successful Bidder the Department will submit all required contract documents to the Governor and Executive Council for approval. Upon award and approval of the Contract by the Governor and Executive Council, the Department shall issue a “Notice to Proceed” to the Design-Builder

After award of the Contract by the Governor and Executive Council, the three duplicate originals of the Contract shall be distributed as follows: one to be kept by the Department, one to be returned to the Design-Builder, and one to be kept by the NH Secretary of State.

In the event the Contract is not awarded within ninety (90) days from the date of the Letter of Intent to Award, the Successful Bidder shall have the right to withdraw its Proposal without loss of the Proposal Guaranty.

103.05 Provisions Regarding Unsuccessful Bidders.

103.05.1 Unsuccessful Bidder Status. Unless notified in writing by the Department to the contrary, Bidders shall be Unsuccessful Bidders as of the earliest of the following dates:

- A. the date of receiving a Notice of Technical Proposal Responsiveness stating that said Technical Proposal contained Non-Curable Technical Proposal Defects;
- B. upon failure to cure Curable Technical Proposal Defects by the expiration of the cure period provided for; or
- C. if determined not to be the Successful Bidder at the Price Proposal Opening, within forty-eight (48) hours after the commencement of the said Opening. Bidders shall be conclusively presumed to have notice of its status as “unsuccessful” at the times specified in the preceding sentence.

103.05.2 Payment of Stipend. Any Bidder submitting a responsive Proposal that is not deemed overall Best-Value will be entitled to receive a stipend from the Department. To receive a stipend the unsuccessful Bidder must return the signed Stipend Agreement found in Appendix B within ten (10) days of receiving a Letter of Intent to Award to the Successful Bidder. If the Stipend Agreement is not received from an unsuccessful Bidder within this period, their Proposals will be automatically returned. If the Department, at its discretion, decides not to award to the Successful Bidder, then the Successful Bidder is also entitled to receive the stipend, except as stated under 103.04.1.5. Upon award and approval of the Contract or decision not to award the Contract, the Department will pay the stipend amount.

In consideration for the Department’s agreement to make payment pursuant to the Stipend Agreement, each Bidder receiving a stipend agrees that the Department will be entitled to use all work product (including patents, concepts, ideas, technology, techniques, methods, processes, drawings, reports, plans and specifications) contained in its Proposal, without any further compensation or consideration to the Bidder.

In accepting the stipend, each Bidder acknowledges that the Department will have the right to inform the successful Bidder, after award, regarding the technical contents of all Proposals for which stipends were accepted, and that the Contract or the Project may incorporate the above-described work product or concepts based thereon, even though the due date for the payment will occur after the award date for the Contract. Furthermore, upon the unsuccessful Bidder’s acceptance of payment hereunder, this right shall extend to allow Department to use such work product in connection with projects other than the Project, at the Department’s sole discretion. However, the Department acknowledges that the use of any of the work product by the Department or the Design-Builder is at the sole risk and discretion of the Department and the Design-Builder, and shall in no way be deemed to confer liability on the unsuccessful Bidder.

Unsuccessful Bidders may elect to refuse payment of the stipend, and retain any rights to their Proposal and proprietary information contained therein that can be defended under New Hampshire Law.

103.05.3 Return of EPDs. If the Department at its discretion, decides not to award to the Apparent Successful Bidder, or the Apparent Successful Bidder is deemed non-responsive, then the EPDs submitted will be returned unopened.

103.05.4 Protest Procedure.

103.05.4.1 Notice of Protest. To protest a determination that a Bidder is unsuccessful (and thus to protest the award of the Contract), Bidders must file a written Notice of Protest with the Commissioner within five (5) Days of the time the protesting Bidder is notified as being unsuccessful as defined in 103.05.1.

At a minimum, the Notice of Protest must contain:

- A. The specific legal and/or factual errors that the Bidder alleges were made by the Department in determining that the Bidder was unsuccessful;
- B. The specific relief sought;
- C. A request to submit additional written evidence and arguments, (if desired); and
- D. A designation of counsel or any other party that will be representing the parties in the protest (if any).

The Department will transmit a copy of said Notice of Protest to the Unsuccessful Bidders within twenty-four (24) hours of receipt.

103.05.4.2 Written Evidence and Arguments. Within ten (10) Days of the filing of a Notice of Protest conforming to 103.05.4.1, the protesting Bidder, the Department Representative, and the Successful Bidder must file with the Commissioner (or such other person as the Commissioner may designate in writing):

- A. all additional written evidence and arguments that the parties desire the Commissioner to consider in evaluating the protest, and
- B. a request for a hearing, if desired. No hearing will be held unless requested in writing, with arguments submitted by the party requesting a hearing. Within said time period, copies of all such material submitted must be delivered to said other parties.

103.05.4.3 Hearing. If held, the hearing will take place within ten (10) Days of the filing of written evidence and arguments by the protesting Bidder, the Department Representative, or the Apparent Successful Bidder, whichever occurs later, at a time and place determined by the Commissioner. The parties agree to accept twenty-four (24) hour telephone notice of such hearing. The protesting Bidder, the Apparent Successful Bidder, and the Department Representative or their designees shall each be afforded an opportunity to be heard by the Commissioner or his designee.

103.05.4.4 Decision. Within ten (10) Days of (a) the close of the hearing (if held), or (b) the last filing of written evidence and arguments (if no hearing is held), the Commissioner or his designee(s) will:

- A. In writing, affirm the determination that the protesting Bidder is unsuccessful;
- B. In writing, revise, amend, or reverse said original determination; or

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- C. Take no action, which shall be considered an affirmation of said original determination.

103.05.5 Debriefing. Within thirty (30) Days after award and approval of the Contract, the Department will be available for an oral debriefing session upon written request made to the Department Representative by an authorized representative of an unsuccessful Bidder. No comparisons to Proposals submitted by other Bidders will be made during the debriefing session.

103.06 Disadvantaged Business Enterprise (DBE) Program Requirements. The Department is required to set an overall annual goal for DBE participation in Federal-aid projects. To fulfill that goal, Bidders during the bidding stage and the Successful Bidder after opening of the bids, are encouraged to demonstrate best efforts to utilize minority Subcontractors by soliciting bids from DBEs. These measures to obtain participation are known as race-neutral. *Race-neutral* DBE participation occurs when a DBE receives a prime Contract through customary competitive procurement procedures, is awarded a subcontract on a prime Contract that does not carry a DBE Contract goal, or even if there is a DBE Contract goal, wins a subcontract from a prime Design-Builder that did not consider its DBE status in making the award (e.g. prime Design-Builder that uses a strict low bid system to award subcontracts). The Department will use Contract goals as a race-conscious means of meeting any portion of the overall goal not achieved by use of race-neutral means.

A DBE is defined as a business that is owned and controlled by one or more socially and economically disadvantaged person(s). For the purpose of this definition:

- (1) "Socially and economically disadvantaged person" means an individual who is a citizen or lawful permanent Contract Administrator of the United States and who is a Woman, Black, Hispanic, Portuguese, Native American, Asian American, or a member of another group, or an individual found to be disadvantaged by the Small Business Administration pursuant to Section 3 of the Small Business Act.
- (2) "Owned and controlled" means a business which is:
 - (a) a sole proprietorship legitimately owned and controlled by an individual who is a disadvantaged person.
 - (b) a partnership, joint venture or limited liability company in which at least 51% of the beneficial ownership interests legitimately are held by a disadvantaged person(s).
 - (c) a corporation or other entity in which at least 51% of the voting interest and 51% of the beneficial ownership interests legitimately are held by a disadvantaged person(s).

The disadvantaged group owner(s) or stockholder(s) must possess control over management, interest in capital, and interest in earnings commensurate with the percentage of ownership. Disadvantaged participation in a joint venture must also be based on the sharing of real economic interest and must include proportionate control over management, capital, and earnings, as above.

If the disadvantaged group ownership interests are real, substantial, and continuing and not created solely to meet the requirements of this program, a firm is considered a bona fide DBE.

A current listing of certified DBEs that may wish to participate in the highway construction program and the scope of work for which they are certified will be in the Proposal.

Credit will be given for the value described by a DBE performing as:

- A. A Design-Builder; actual value of work performed by own forces.
- B. An approved Subcontractor; 100% of expenditures committed.
- C. An owner-operator of construction equipment; 100% of expenditures committed.
- D. A manufacturer; 100% of expenditures committed.
The manufacturer must be a firm that operates or maintains a factory or establishment that produces on the premises the materials or supplies obtained by the Design-Builder.
Brokers and packagers shall not be regarded as manufacturers.
- E. A regular dealer; 60% of expenditures committed.

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A regular dealer is defined as a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials or supplies required for the performance of the Contract are bought, kept in stock, and regularly sold to the public.

Brokers and packagers shall not be regarded as regular dealers.

- F. A renter of construction equipment to a Design-Builder; 20% of expenditures committed, with or without operator.
- G. A bona fide service provider; 100% of reasonable fees or commissions.
Eligible services include professional, technical, consultant, or managerial, services and assistance in the procurement of essential personnel, facilities, equipment, materials, or supplies required for the performance of the Contract.
Eligible services also include agencies providing bonding and insurance specifically required for the performance of the Contract.
- H. A trucking, hauling, or delivery operation.
100% of expenditures committed when trucks are owned, operated, licensed and insured by the DBE and used on the Contract and, if applicable, includes the cost of the materials and supplies.
100% of expenditures committed when the DBE leases trucks from another DBE firm including an owner-operator.
100% of reasonable fees or commissions the DBE receives as a result of a lease arrangement for trucks from a non-DBE, including an owner-operator.
- I. Any combination of the above.

On all Federal-aid projects, the Design-Builder, during the life of the Contract and on a semi-annual basis for the periods covering October 1st to March 31st and April 1st to September 30th shall submit a listing of all DBEs that were engaged in the Work, specifying item(s) of work performed by each DBE and the dollar amount paid for each item of work. Copies of canceled checks to the DBEs or statements from the DBEs together with supporting documentation (i.e., billings, invoices, etc., referenced to the Contract) must be submitted as proof of payment. This documentation shall be submitted to the Department within 30 days of the reporting period end. Failure of the Design-Builder to submit this information may result in the Department withholding progress payments.

On Federal-aid projects that specify a DBE Contract goal in the Information Report, Bidders during the bidding stage and the Successful Bidder after the opening of the bids, shall make every reasonable good faith effort to use certified disadvantaged business enterprises for work to be performed under the proposed Contract. In addition the following is also required on Federal-aid projects which specify a DBE Contract goal:

Within 3 working days after the bid opening date, the Successful Bidder shall file with the NHDOT Office of Federal Compliance a Disadvantaged Business Enterprise (DBE) Commitment Form provided by the Department. This form will list the DBE firms that will be used during the execution of the Work. The list shall show the name of the firm, the item/material/type of work involved and the dollar amount of work to be performed. The dollar total of each commitment shall be totaled and a percentage determined. In addition to the commitment form, letters of intent signed by principals of the Successful Bidder and each DBE firm listed, shall be submitted prior to Department approval of the DBE commitment.

If the Successful Bidder cannot provide the list and accepted letters of intent showing DBE participation in the Work, within the above time frame, the Design-Builder may request additional time through the Department's DBE Liaison Officer to comply or to provide written documentation of efforts to obtain participation. Acceptable documentation showing all good faith efforts made to obtain participation may be reason to waive the goal requirement of the project.

Failure to provide the required listing with the dollar participation total or acceptable documentation of good faith efforts to obtain DBE participation within 3 working days after the bid opening date, or by another deadline

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established by the DBE Liaison Officer will be considered a lack of responsiveness on the part of the Successful Bidder. Rejection of the low bid under these circumstances will require the Successful Bidder to surrender the Proposal Guaranty to the Department.

The submission and approval of the above forms does not constitute a formal subcontract as required in 108.01.

If for any reason during the progress of the Work the Design-Builder finds that DBEs included on the list are unable to perform the proposed work, the Design-Builder, with written release by the committed DBE or approval of the Department, may substitute other DBE firms for those named on the list.

If the Design-Builder is able to document clearly his inability to find qualified substitute firms to meet the project goal, the Design-Builder may request in writing a waiver of that goal.

If at any time during the life of the Contract it is determined that the Design-Builder is not fulfilling the goal or commitment(s) and is not making a good faith effort to fulfill the DBE requirement, the Department may withhold progress payments.

Failure of the Design-Builder to meet the project goal or the specified DBE commitment(s), whichever is the lowest, will result in a reduction in Contract payment by an amount equal to the difference between the actual Contract dollars multiplied by the applicable commitment percentage and the dollar value of the work actually performed by the DBEs. If the Design-Builder's failure to meet the DBE goal or commitment(s) in the Contract is the result of circumstances clearly documented to be beyond the control of the Design-Builder, a written request for waiver of the goal or commitment(s) must be received. The Commissioner may waive, in whole or part, the reduction in Contract payments specified herein.

Fulfillment of the goal percentage shall be determined by dividing the dollars committed to the DBEs by the Contract Amount.

These requirements are in addition to all other Equal Employment Opportunity requirements on Federal-aid Contracts.

103.07 The Department's Rights. The Department may investigate the Proposal of any Bidder under consideration, may require confirmation of information furnished by a Bidder, may require additional information from a Bidder concerning its Proposal, and may require additional evidence of qualifications to perform the work described in the RFP. The Department reserves the right, in its sole discretion, to:

- A. Investigate the qualifications of any Bidder.
- B. Require confirmation of information furnished by a Bidder.
- C. Require additional evidence of qualifications to perform the Work.
- D. Reject any or all Proposals without further obligation or reimbursement to Bidders except as expressly set forth in 103.05.2.
- E. Issue Amendments to the RFP, the RFP Documents, and the RFP process. Amendments to the RFP shall be circulated to all short-listed teams in advance of the Proposal Due Date and, subject to 102.02.3.3, the Department may extend the Proposal Due Date if such modifications are deemed by the Department to be material and substantive.
- F. Cancel or withdraw the RFP, or any part hereof.
- G. Issue a new request for final proposals for the Project.
- H. Appoint evaluation committees to review Proposals, make recommendations to the Department, and seek the assistance of outside technical experts and consultants in Proposal evaluation.

- I. Revise and modify, at any time before the Proposal Due Date, the factors it will consider in evaluating Proposals and to otherwise revise or expand its evaluation methodology as set forth herein. If such revisions or modifications are made, the Department will circulate an Amendment to all short-listed Bidders setting forth the changes to the evaluation criteria or methodology. The Department may extend the Proposal Due Date if such changes are deemed by the Department to be material and substantive.
- J. Hold meetings, conduct discussions, and exchange correspondence with the Bidders to seek an improved understanding and evaluation of the Proposals.
- K. Seek or obtain data from any source that has the potential to improve the understanding and evaluation of the Proposals.
- L. Disclose information contained in the Proposals to the public as described herein unless Bidder can defend it as proprietary information under New Hampshire Law.
- M. Approve or disapprove changes to a Bidder's organization, key personnel, or named Subcontractors.
- N. Waive or require correction of minor deficiencies, informalities, and irregularities in the Proposals; or seek and receive clarifications to a Proposal.
- O. Disqualify any team that changes its Proposal after submission without Department approval.
- P. Not issue a Notice to Proceed after execution of the Contract.
- Q. Exercise any other right reserved or afforded to the Department under the RFP.

The RFP does not commit the Department to enter into a contract or proceed with the procurement described herein. Except as expressly set forth in 103.05.2, no unsuccessful Bidder shall be entitled to reimbursement for any of its costs in connection with the RFP. All such costs shall be borne solely by the Bidder.

In no event will the Department be bound by, or liable for, any obligations with respect to the Work until such time (if at all) as the Contract has been awarded and, then, only to the extent set forth in the Contract.

103.08 Bonds. The Design-Builder shall furnish the Department with a surety bond or bonds equal to the sum of the Contract Amount. The Department may also require Warranty and Maintenance Bonds for specific items as specified in the Project Requirements in the RFP. For a related provision, see 103.04.

The Design-Builder shall procure bonds from a company organized and operating in the United States, licensed or approved to do business in the State of New Hampshire, and listed on the latest Federal Department of the Treasury listing for "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies".

The bonds shall each be in the full Contract amount, payable to the "Treasurer – State of New Hampshire," and on the Department's forms, on exact copies thereof, or on forms that do not contain any significant variations from the Department's forms as solely determined by the Department.

By issuing a bond, the Surety agrees to be bound by all terms of the Contract, including those related to payment, time of performance, quality, and warranties to the same extent as if all terms of the Contract are contained in the bond(s).

Regarding claims related to any obligations covered by these bonds, the Surety shall provide, within sixty (60) Days of Receipt of written notice thereof, full payment of the entire claim or written notice of all bases upon which it is denying or contesting payment. Failure of the Surety to provide such notice within the sixty (60) Day period constitutes the Surety's waiver of any right to deny or contest payment and the Surety's acknowledgment that the claim is valid and undisputed.

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If the Surety becomes financially insolvent or stops operating in the United States, the Design-Builder shall file new bonds complying with this Section within ten (10) Days of the date the Design-Builder is notified of such change.

SECTION 104 -- SCOPE OF WORK

104.01 Intent of the Contract. The intent of the Contract is to provide for the design, construction, and completion of a functional and complete Project in conformity with the Contract. The Design-Builder shall furnish all Work to achieve this intent including all Work that may be reasonably inferred to be required from the Contract or from prevailing industry or trade custom, whether or not specifically called for.

104.01.1 Project Scope. The anticipated scope of work to be performed by the successful Design-Builder under the Design-Build Contract for this Project may include, but not be limited to, the following:

1. interpretation and evaluation of geotechnical data,
2. design development, documentation, coordination with public & private entities.
3. compliance with all necessary permits and approvals,
4. complete abstract of title for all impacted parcels,
5. final Right-of-Way mapping, appraisals, negotiations, and acquisitions(see 104.15.15.2),
6. Record ROW plans reflecting all final acquisitions. A paper copy shall be delivered to NHDOT after recording, with recording data included,
7. coordination and execution of required utility relocations and adjustments,
8. bridge construction,
9. roadway construction,
10. quality assurance and quality control for design and construction, including necessary testing.
11. demolition and removal of the existing bridge,
12. maintenance and protection of traffic during construction, and
13. overall project management.

Brief descriptions of this anticipated work are set forth below, with more detailed requirements provided in the Project Requirements in the RFP.

104.01.1.1 Anticipated Design Services. Unless otherwise specified in the Project Requirements in the RFP, design services may include, but are not limited to:

1. surveying;
2. geotechnical investigation and analysis;
3. hydraulic and hydrologic analysis;
4. scour analysis;
5. bridge design;
6. pavement design;
7. highway design and traffic engineering;
8. utility coordination, protection and relocation; and
9. design of any other necessary elements, such as:
 - a. signs,
 - b. pavement markings,
 - c. drainage facilities,
 - d. stormwater management facilities,
 - e. lighting, and
 - f. landscape treatments.

Design and subsurface information provided by the Department is for reference purposes only and must be validated and augmented as necessary to provide the final design. Any additional investigative information that the Design-Builder may need for its particular design shall be included in the Design-Builder's Technical Proposal and Price Proposal.

104.01.1.2 Anticipated Right-of-Way Services. Unless otherwise specified in the Project Requirements in the RFP, the Design-Builder shall be responsible for all work necessary to complete final Right-of-Way

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mapping, appraisals, title research, and negotiations and acquisition (except condemnation see 104.15.15.2) of all property rights deemed necessary for the Project. All Right-of-Way acquisition and relocation costs related to compensating landowners for property rights will be reimbursed by the Department, and shall not be included in the Design-Builder's Price Proposal. ROW information provided is approximate location only. No title work has been done beyond current owner information for public hearing notification.

The Department will review the Right-of-Way plans developed and submitted by the Design-Builder and will approve temporary acquisitions necessary for reasonable access to the work. The Design-Builder is responsible for additional or alternative rights of access to the work which may provide more convenience to the contractor, but be beyond what the Department determines necessary for the project. Any temporary rights required to accommodate staging and storage areas shall be the sole responsibility of the Design-Builder.

104.01.1.3 Utility and Other Third Party Coordination. Unless otherwise specified in the Project Requirements in the RFP, services shall include identification of and coordination with all third parties affected by the Project, including utilities, municipalities, and railroads. As part of its coordination responsibilities, the selected Design-Builder shall be responsible for resolving, within the project schedule, all utility, municipal, railroad, and other third party conflicts resulting from the construction of the Project.

Relocation costs for utilities shall not be included in the Price Proposal. No additional time or compensation will be granted for delays, inconvenience, or other damages sustained by the selected Design-Builder or its subcontractors due to interference or lack of cooperation from the utility companies or other third parties associated with the relocation and/or protection of utilities and/or facilities during construction, other than as specified in Section 109.04.

104.01.1.4 Anticipated Construction Services. Unless otherwise specified in the Project Requirements in the RFP, construction services may include, but are not limited to:

1. roadway,
2. civil/site,
3. bridge and structures work;
4. traffic control devices;
5. the demolition and removal of the existing bridge and approaches;
6. all necessary foundation work, substructure work, and excavation;
7. drainage;
8. utility relocations and coordination, erosion and sediment control; and
9. compliance with all Federal, state, and local rules and regulations applicable to the Work. Design-Builders will also be expected to provide construction management services, work zone traffic management, and quality assurance and quality control, and all testing

104.01.1.5 Anticipated Environmental Services. Unless otherwise specified in the Project Requirements in the RFP, environmental services shall include, but are not limited to, any permit amendments required by the Proposal.

The selected Design-Builder shall be responsible for compliance with all permit terms and conditions, including the costs incurred in performing compliance activities. Fines associated with environmental permit or other regulatory violations shall be the sole responsibility of the Design-Builder.

104.02 Revisions to the Contract

A. General. The Department reserves the right to revise the Contract at any time. Revisions to the Contract neither invalidate the Contract nor release the surety, and the Design-Builder agrees to perform the Work as revised. The Design-Builder shall not proceed with the revised Work until directed to do so by the Department, but shall continue with all work unaffected by the revision. Nothing contained in this section shall constitute a waiver of the State's sovereign immunity.

If the Department concludes that the Contract should be revised, as provided in 104.02.G.4, compensation will be provided in accordance with 109.04, and time extensions will be granted in accordance with 108.07. In addition, the term “adjustment” as used in 104.02.B, C, and D is defined as a time extension in accordance with 108.07 and compensation in accordance with 109.04. In 104.02.C, the phrase, “as provided elsewhere in the Contract,” means as provided in 108.07 with regard to time extensions and in 109.04 with regard to compensation.

B. Differing Site Conditions. “Differing Site Conditions” are subsurface or latent physical conditions of a man-made nature that, at the time of submittal of the Proposal are:

- A. Materially different from conditions indicated in the RFP and Reference Documents;
- B. Not discoverable from a reasonable investigation and analysis of the site, including subsurface conditions, prior to submittal of Proposal;
- C. Materially different from conditions generally recognized as inherent in the nature of the Work in the area of the site of Work; and
- D. Actually unknown to the Design-Builder, and its Subcontractors.

Differing Site Conditions could include the following conditions if all the requirements set forth in the preceding paragraph are met: hazardous substances, archeological deposits, sunken man-made objects, or utilities. Differing Site Conditions expressly do not include conditions related to geology or hydrology, including bedrock, soils, groundwater, or other natural conditions.

C. Risk of Other Conditions. All costs, Work, Delays, or other damages related to or arising from site conditions that are not Differing Site Conditions are the sole risk and responsibility of the Design-Builder.

D. Notice and Procedural Requirements. If the Design-Builder discovers what it considers Differing Site Conditions that may cause adjustments to compensation, time, or other Contract requirements, the Design-Builder shall provide written notice within forty-eight (48) hours of discovery and before doing any Work relating to such conditions as provided in 104.02.G. The Design-Builder shall then comply with all other requirements of 104.02.G. The Design-Builder will not be entitled to any change to compensation, time, or Work requirements without proper notice as specified herein. Failure to provide such notice or to otherwise comply with this Section 104.2 will constitute a waiver of all claims related to such conditions.

E. Investigation/Adjustment. Upon notification by the Design-Builder or upon the Department’s own initiative, the Department will investigate the conditions. If the Department determines that Differing Site Conditions exist and that the Differing Site Conditions have caused an increase in the cost or time required for the performance of the Work, then the Design-Builder is entitled to an Equitable Adjustment for the additional costs of compensable items listed in 109.04 that are caused directly by the Differing Site Conditions. If the Department determines that Differing Site Conditions exist and that the Differing Site Conditions have caused a decrease in the cost or time required for the performance of the Work, then the Department is entitled to a credit in the amount of savings to compensable items listed in 109.04, that are caused directly by the Differing Site Conditions. Delays caused by Differing Site Conditions will be considered in accordance with Section 108.07.

F. Extra Work. If the Design-Builder believes that it has been required to perform work not originally in the Contract but found to be essential for the completion of the Contract, the Design-Builder shall notify the Department in accordance with 104.02.G. Failure to provide notice as specified in 104.02.G constitutes a waiver of the Design-Builder’s entitlement to compensation or a time extension and releases the State from responsibility for providing compensation or a time extension for any related claims filed under 105.18. If the Department determines that Extra Work is required, the Department will compensate the Design-Builder for the Extra Work in accordance with 109.04. Time extensions, if warranted, will be determined in accordance with 108.07.

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G. Design-Builder Notification.

1. Design-Builder Initial Notification. The Design-Builder shall provide immediate written notification to the Department upon discovering a circumstance that the Design-Builder believes will require a revision to the Contract. Upon notification, the Department will attempt to resolve the identified issue as quickly as possible. No further work is to be performed or expense incurred related to the alleged revision unless directed otherwise in writing by the Department.

2. Design-Builder Notice. If the Department has not resolved the identified issue within 2 working days the initial notification was given by the Design-Builder, then the Design-Builder shall provide written notice to the Department of any circumstance that may require a revision to the Contract and shall contain the following information:

- A. No further work is to be performed or expense incurred related to the alleged revision unless directed otherwise in writing by the Department.
- B. Immediately notify the Department in writing of the alleged revision occasioned by the site conditions or actions by the Department and, within five days of the date that the alleged revision or action was noted, provide the following information to the Department in writing:
 - 1. The date of occurrence and the nature and circumstances of the occurrence that constitute a revision.
 - 2. Name, title, and activity of each Department representative knowledgeable of the alleged revision
 - 3. Identify any documents and the substance of any oral communication involved in the alleged revision.
 - 4. Basis for belief that a delay occurred and a time extension is due. Also, provide the basis for any contention that accelerated performance was necessary and compensation due.
 - 5. Basis for belief that the work is not required by the Contract.
 - 6. Particular elements of Contract performance for which additional compensation may be sought under this Section including:
 - a. Item(s) that has been or may be affected by the alleged revision.
 - Design considerations concerning the interaction of the change.
 - Labor or materials, or both, that will be added, deleted, or wasted by the alleged revision and what equipment will be idled or required and any additional testing requirement compensations
 - Delay and disruption in the manner and sequence of performance that has been or will be caused.
 - Increases to Contract Amount(s), delivery schedule(s), staging, and Contract Time estimated due to the alleged revision.
 - 7. Estimate of the time within which the Department must respond to the notice to minimize cost, delay, or disruption of performance.

The Department and Design-Builder shall maintain records of labor, equipment, and materials used or made necessary by the circumstance. Such record keeping shall start when notice is received by the Department.

3. Written Acknowledgement, by Department. The Department will acknowledge in writing the receipt of the Design-Builder's written notice.

4. Final Written Response, by Department. Within 5 working days of receiving the Design-Builder's written notice, unless the Design-Builder agrees to a longer time period, the Department will provide a written response that includes one of the following:

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General Provisions for Design-Build Project**

a. Confirmation of the need for a revision to the Contract. A time extension, if one is necessary, will be determined in accordance with 108.07. Compensation for the revision, if any is necessary, will be determined in accordance with 109.04. The Department will give direction to the Design-Builder regarding how to proceed with Work affected by the revision.

b. Denial of the request for a revision to the Contract, in which case the Department will explain why the issue does not represent a revision to the Contract. Upon receipt of such a denial, the Design-Builder shall immediately proceed with all Work that may have been halted due to the circumstances for which the Design-Builder provided notice.

c. A request for additional information or time for review, in which case the Department will identify what is needed and by when; the Department will issue a response within 5 working days of receiving the additional requested information.

5. Contract Revisions Without Notification. The Department will not make revisions to the Contract Amount or Contract Time allowed if the Design-Builder did not give notice.

6. Design-Builder's Recourse. If the Design-Builder disagrees with the Department's final written response or the Department's response is untimely, the Design-Builder may pursue a claim in accordance with 105.18.

104.03 Maintenance of Traffic. The Design-Builder shall keep all roads open to all traffic during construction. Where provided in the Contract, or approved by the Department, traffic may be bypassed over an approved detour route. The Design-Builder shall submit proposed detour plans for documentation in accordance with 105.02, which shall show the proposed location, alignment, grade, typical cross section, protective fixtures and signing. The section of the project being used by public traffic shall be kept in a condition that safely and adequately accommodates traffic. The Design-Builder shall furnish, erect, and maintain barricades, warning signs, delineators, striping, flaggers, and pilot cars in accordance with the MUTCD and Sections 618, 619 and 632. The Design-Builder shall bear all expense of maintaining the section of road undergoing improvement including all temporary approaches or crossings and intersections with trails, roads, streets, businesses, parking lots, residences, garages, farms, and other features as may be necessary. Snow removal from the roadway is not required during winter work suspensions if all conditions set forth in 104.03B and 619.3.1.9.1 are met

A. Maintenance of Traffic During Suspension of Work.

1. Suspensions Ordered by the Department and not caused by the Design-Builder or Winter Suspensions due to climatic conditions. The Design-Builder shall make passable and open to traffic the sections of the project and temporary roadways as agreed upon between the Design-Builder and the Department for the accommodation of necessary traffic during the anticipated period of suspension.

During this suspension period, the maintenance of the temporary roadway and sections of the Project will be the responsibility of the Department subject to 105.14.

When Work is resumed, the Design-Builder shall replace or restore any work or materials lost or damaged because of the temporary use of the Project and remove work or materials used in the temporary maintenance and complete the Project as though its prosecution has been continuous and without interference. Additional work caused by the suspension, for reasons beyond the Design-Builder's control, in accordance with 104.09 and 619.5.4, will be paid as provided for in 109.04.

2. Other Suspensions of Work. When Work is suspended for any other reason including but not limited to the following: for failure to correct conditions unsafe for the workers or the general public, for failure to carry out orders of the Department, or for other reasons caused by the Design-Builder, all costs for maintenance of the roadway to accommodate traffic during the suspended period shall be borne by the Design-Builder.

B. All Projects, which will encompass construction activities over the course of two or more construction seasons, shall be required to hold a "Project Winter Maintenance Meeting" prior to October 15th. This meeting shall, as a minimum, involve personnel from the Design-Builder, Bureau of Construction,

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Division of Operations, and the local municipality, as appropriate. The meeting will serve to determine and document the work required by the Design-Builder prior to the winter maintenance season and the responsibilities of all the parties during that season. Should the Design-Builder fail to perform the required work in advance of the winter maintenance season, all costs for maintenance of the roadway to accommodate the safe flow of traffic during that period, whether work is suspended or not, shall be borne by the Design-Builder, including all snow removal costs.

104.04 Rights In and Use of Materials Found on the Project. The Department may authorize the use of materials, not previously described in the contract documentation, found in the limits of excavation that are suitable for completing the work. The removed material shall be replaced with acceptable material at no cost to the Department. The authorization of such work shall be considered under 104.02 or considered as a Value Engineering Proposal under 104.11

It is expressly understood that the Design-Builder is not entitled to any compensation whatsoever, including anticipated profits on the expected use of any materials anticipated by the Design-Builder, but found to be nonexistent or unfit for use.

Unless otherwise provided, the material from any structures scheduled for demolition or removal may be used temporarily by the Design-Builder in the erection of the new structure. Such material shall not be modified or otherwise damaged without approval.

Unless otherwise specified, or except as stated in 202 and 502, the Design-Builder shall not take title to structures found on the highway. Such structures, including but not limited to, catch basin frames and grates, drop inlet frames and grates, and manhole frames and covers, curbing, beam guardrail, guardrail fittings, pipe, traffic control devices, and all other materials designated to be salvaged, unless otherwise specified in Contract documentation or directed, shall be carefully salvaged and stored within approved portions of the right-of-way or in other approved locations for loading by the Design-Builder onto State owned vehicles as directed. Care shall be taken during removal operations so as not to damage any salvaged materials. The Design-Builder shall remove and properly dispose of existing guardrail not to remain as an integral part of the highway as directed.

Structures and obstructions no longer an integral part of the work and not designated or directed for salvage, including guardrail posts, railroad ties, delineators, markers, cables, wire, light pole bases, signs, fence, gates, and any other visible obstruction to the Work, shall become the property of the Design-Builder, who shall use, recycle, or dispose of them properly at no expense to the State. Materials to be reused on the project shall be identified and approved by the Department prior to the reinstallation.

Removal and disposal of man-made materials that are not visible or designated for removal found within the limits of the project and that are not suitable for fill within the limits of the project or at a disposal site in accordance with 106.10, shall be the responsibility of the Design-Builder. Compensation for such removal and disposal will be in accordance with 104.02. All other work under this section, unless specifically provided for herein, or in other sections of the Contract, will not be paid for separately, but shall be included in the lump sum price.

104.05 Final Cleaning Up. Before final inspection and acceptance of the Work, the Project Site, borrow areas, and local material sources and all elements used and areas occupied by the Design-Builder in connection with the Work shall be cleaned of all rubbish, excess materials, temporary structures, and equipment and all parts of the Work shall be left in an acceptable condition. The cost of final cleanup shall be included in the lump sum price.

104.06 Restoration of Surfaces Opened by Permit. Any individual, firm or corporation may be issued a permit by the proper authorities for entering the Project for the purpose of constructing or reconstructing any utility service. The Design-Builder shall allow the permit holder to enter and work within the Project limits for this purpose.

104.07 Railway-Highway Provisions. If the Contract requires that materials be hauled across the tracks of any railway, the Design-Builder will arrange with the railway for use of new crossings or any existing crossings.

Work performed on the railway Right-of-Way shall be performed without interfering with the movement of trains or traffic of the railway company. The Design-Builder shall prevent accidents, damage, or unnecessary delay

or interference with the railway trains or other property. If work on the railway Right-of-Way is to be performed by both the Design-Builder and railway company, the Design-Builder shall coordinate the work activities with the railway company work forces and schedule.

The Design-Builder shall secure flagging service from the railroad for the protection of railroad traffic during the progress of work by the Design-Builder on, over, under, or adjacent to the tracks of the railroad. The Design-Builder shall reimburse the railroad for the expense of such service.

If the railroad grants the Design-Builder's request for any temporary crossing or if any temporary crossing is ordered by the Department's Bureau of Rail and Transit, due to the Design-Builder's construction method, the Design-Builder shall assume the cost of installing, maintaining, removing, and protecting such temporary crossing. The type and method of protection of the crossing and the insurance required shall be as determined by the railroad.

104.08 Construction Over or Adjacent to Navigable Waters. Work over, on, or adjacent to navigable waters shall be conducted without interfering with free navigation of the waterways and so that the existing navigable depths will not be impaired except as allowed by permit issued by the U.S. Coast Guard or the U.S. Army Corps of Engineers, as applicable.

104.09 Design-Builder's Responsibility for Work. Until Final Acceptance of the project by the Department, the Design-Builder is responsible for and shall protect the Work against injury or damage from all causes whether arising from the execution or the nonexecution of the Work except as provided in 104.03.B.1.

The Design-Builder, at their expense, shall rebuild, repair, restore, and make good all losses, injuries, or damage to any portion of the Work from any cause before Acceptance, except for loss, injury, or damage due to causes not under the control and without the fault or negligence of the Design-Builder. Causes not under the control of the Design-Builder include, but are not restricted to the following:

A. Damage by Occurrence. This includes damage to the work in progress that is caused by natural disasters such as earthquake, tidal wave, tornado, hurricane, or other cataclysmic phenomenon of nature; acts of a public enemy; and acts of governmental authorities.

B. Damage by Public Traffic. This includes damage to any permanent element of the highway which is completed to the stage of serving its intended function and is subsequently damaged by public traffic. It also includes damage to temporary impact attenuation devices during winter suspension.

The Design-Builder shall repair damage due to such excepted causes as provided for in 104.02 as determined and ordered by the Department. The Design-Builder will be reimbursed for damage caused by public traffic (not by vandalism or the Design-Builder's equipment) if unsuccessful in collecting the cost of repair from the responsible party. To be reimbursed, the Design-Builder must have made every reasonable effort to collect the costs from the person or persons responsible for the damage. A reasonable effort will be considered to have been made if the Design-Builder certifies that the law enforcement agency having jurisdiction has been contacted in order to obtain the identity of the responsible person or persons, has corresponded in writing via certified mail with the responsible party and or his/her insurance company, if this information is available, and has failed to recover the cost of damages despite these efforts.

In case of suspension of the Work from any cause, the Design-Builder is responsible for the Work under the Contract and shall prevent damage to the project, provide for normal drainage, and erect necessary temporary structures, signs, or other facilities. The Design-Builder shall also maintain in an acceptable growing condition all living material in newly established plantings, seedings, and soddings furnished under the Contract, and protect new tree growth and other designated vegetative growth against injury. When work is suspended for reasons delineated in 104.03.B.2, the costs during the period of suspension shall be borne by the Design-Builder.

104.10 Environmental Protection. The Design-Builder shall comply with all Federal, State, local laws, and regulations controlling pollution of the environment; and preventing the spread of prohibited invasive plants listed in Table 3800.1 of New Hampshire Department of Agriculture, Markets and Food Rule AGR 3800. Pollution of streams, lakes, ponds, and reservoirs with fuels, oils, bitumens, chemicals, suspended silt, or other harmful

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materials and pollution of the atmosphere from particulate and gaseous matter shall be avoided to the extent practicable. Detailed requirements implementing this policy are outlined in 107.

104.11 Value Engineering Change Proposals by the Design-Builder. The Design-Builder is encouraged to use ingenuity and experience to develop and offer any Value Engineering Change Proposal (VECP) to the Department for alternative construction designs, methods, procedures, and other innovations that result in a lower total cost, improved quality, or both. It is the intent of this provision to share with the Design-Builder any direct cost savings as a result of VECP(s) generated by the Design-Builder and approved by the Department. Any cost savings generated to the Contract as a result of a VECP shall be shared equally between the Design-Builder and the Department.

Price proposals shall not rely on the anticipated approval of any VECP(s) by the Department. The Design Builder and the Department shall equally share lump sum savings. If a VECP is rejected, the Work shall be completed per the Contract requirements at the lump sum price. VECP(s) shall only be submitted by the Design-Builder after the Contract is awarded.

If the Department determines that the time for response indicated in the submittal under C.5 is insufficient for review, the Design-Builder will be promptly notified. Based on the additional time needed by the Department for review and the affect on the Design-Builder's schedule occasioned by the added time, the Department will evaluate the need for a time adjustment to the Contract in accordance with 108.07.

The Design-Builder shall have no claim against the Department for any delay to the Contract based on the failure to respond within the time indicated in B.5 or C.5 in the submittal if additional information is needed to complete the review.

- A. **Submittal of VECP – General.** VECP(s) that will be considered are those contemplated to produce a savings to the Department without impairing essential functions and characteristics of the facility including but not limited to, service life, economy of operation, ease of maintenance, desired appearance, safety, and impacts to the traveling public or the environment during and after construction.
- B. **Submittal of a Conceptual Proposal.** The Design-Builder may submit a conceptual proposal for preliminary evaluation for VECP(s) that require a significant amount of design or other development resources. The Department will evaluate the information provided and advise the Design-Builder if any conditions or parameters of the Conceptual Proposal are found to be grounds for rejection. Preliminary review of a Conceptual Proposal reduces the Design-Builder's risk of subsequent rejection but does not commit the Department to eventual approval of the full VECP. The following materials and information shall be submitted with each Conceptual Proposal:
 - 1. A statement that the proposal is submitted as a Conceptual VECP
 - 2. A general description of the difference between the existing Contract and the proposed change, and the advantages and disadvantages of each, including effects on cost, service life, economy of operation, ease of maintenance, desired appearance, safety, and impacts to the traveling public or the environment during and after construction.
 - 3. A set of conceptual plans and description of the proposed changes to the Contract requirements.
 - 4. An estimate of the anticipated cost savings.
 - 5. When a response to the Conceptual VECP by the Department is required.
 - 6. Amount of time necessary to develop a Full VECP.
 - 7. Date by which a Contract Change Order must be executed to obtain the maximum benefit from the VECP.
 - 8. The effect the VECP will have on the completion dates in the Contract.
- C. **Submittal of Full VECP.** The following materials and information shall be submitted with each Full VECP.
 - 1. A statement that the proposal is submitted as a Full VECP.
 - 2. A description of the difference between the existing Contract and the proposed change, and the comparative advantages and disadvantages of each including effects on service life, economy of operations, ease of maintenance, desired appearance, safety and impacts to the traveling public or the environment during and after construction.

3. A complete set of plans and specifications showing the proposed revisions relative to the original Contract features and requirements. The Department requires a NH Professional Engineer's stamp and signature on any Engineering changes.
4. A complete cost analysis indicating the final estimated costs and quantities to be replaced, compared to the new costs and quantities generated by the VECP, and the cost effects of the proposed changes on operational, maintenance, and other considerations.
5. A statement specifying the date by which a Change Order adopting the VECP must be executed so as to obtain the maximum cost reduction during the remainder of the Contract.
6. A proposed revised project schedule illustrating the impacts of the VECP on the Contract completion date(s) and any other milestone dates.
7. A description of any previous use or testing of the VECP and the conditions and results therewith.
8. If the VECP was previously submitted on another Department project, indicate the date, Contract number, and the action taken by the Department.

D. Conditions. VECP(s) will be considered only when all of the following conditions are met:

1. VECP(s), approved or not approved by the Department, apply only to the ongoing Contract(s) referenced in the Proposal and become the property of the Department. The VECP(s) shall contain no restrictions imposed by the Design-Builder on their use or disclosure. The Department has the right to use, duplicate, and disclose in whole or in part any data necessary for the utilization of the VECP. The Department retains the right to utilize any accepted VECP or part thereof on any other or subsequent projects without any obligation to the Design-Builder. This provision is not intended to deny rights provided by law with respect to patented materials or processes.
2. If the Department is already considering certain revisions to the Contract, or the Standard Specifications, or has approved certain changes in the Contract for general use which are subsequently incorporated in a VECP, the Department will reject the VECP and require the Design-Builder to proceed without any obligation to the Design-Builder.
3. The Design-Builder shall have no claim against the Department for additional costs or delays resulting from the rejection of a VECP, including but not limited to development costs, loss of anticipated profits, increased material or labor costs.
4. The Department will determine if a VECP qualifies for consideration and evaluation. It may reject any VECP that requires excessive time or costs for review, evaluation, or investigations, or which is not consistent with the Department's design policies and basic design criteria for the Project.
5. The Department will reject all or any portion of work performed under an approved VECP if unsatisfactory results are obtained. The Department will direct the removal of such rejected work and require construction to proceed under the original Contract requirements without reimbursement for any work performed or removal of that work under the VECP. Where modifications to the VECP are approved to adjust to field or other conditions, reimbursement will be limited to the total amount payable for the work at the Contract bid prices as if the work were constructed under the original Contract requirements. The rejection or limitation of reimbursement shall not constitute the basis of any claim against the Department for delay or for any other costs.
6. The VECP proposed work shall not contain experimental features but shall be proven features that have been used under similar or acceptable conditions on other projects or locations acceptable to the Department.
7. VECP(s) will not be considered if equivalent options are already provided in the Contract documents.
8. The savings generated by the VECP must be sufficient to warrant review and processing.
9. A VECP changing the type or thickness or both type and thickness of the pavement structure will not be considered. Also, any VECP that solely substitutes one material for another will not be considered.
10. Additional information needed to evaluate VECP(s), shall be provided in a timely manner. Untimely submittals of additional information will result in rejection of the VECP. Where design changes are proposed, the additional information could include results of field investigations and surveys, design computations, and field change sheets.

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11. Approval or rejection of a VECP on one Contract does not guarantee approval or rejection on another Contract.
12. Approval of the Conceptual VECP in no way obligates the Department to approve the Full VECP.
13. No work related to a VECP shall be performed under Force Account. Agreed prices must be determined for all pay items related to the VECP before it is approved.
14. VECP(s) that only reduce or eliminate Contract pay items will not be considered.
15. If the VECP creates a significant change as defined in 104.02 that would not have otherwise resulted, the Design-Builder has no entitlement for additional compensation as provided for in 104.02.

E. **Payment.** If the VECP is accepted and approved, the changes and payment will be authorized with a Change Order. Reimbursement will be made as follows:

1. The changes will be incorporated into the Contract at agreed upon unit or lump sum prices.
2. The cost of the revised work as determined from the changes will be paid directly. In addition, the Department will pay the Design-Builder 50 percent of the net savings to the Department as reflected by the agreed upon difference between the cost of the revised work and the cost of the related construction required by the original Contract prices.
3. The cost for development, design, and implementation of the VECP are not eligible for reimbursement.
4. The Design-Builder may submit VECP(s) for an approved Subcontractor. Subcontractors may not submit a VECP(s) except through the Design-Builder.
5. VECP payments are for direct savings or costs. Indirect saving or costs (time, user costs, etc.) will not be included in payment calculations.

104.12 Health and Safety.

104.12.1 Design-Builder's Safety Plan. Prior to award, a copy of the Design-Builder's Safety Plan must be on file with the Contracts Section of the Department as a condition of Award. If such plan is revised during the Contract Time, the Design-Builder shall provide the updated plan to the Department. The Design-Builder shall comply with its safety plan and this 104.12. The Design-Builder shall be responsible for all claims or damages arising from failure to so comply and indemnifies and holds harmless the Department from all claims and damages arising from such non-compliance.

104.12.2 Project Specific Emergency Planning. Unless the Contract provides for closure of an existing facility, the Design-Builder shall ensure that essential police, fire, rescue, and ambulance services have reasonable and timely access to and through the Project Limits. The Design-Builder shall contact all emergency service providers in the area, discuss potential impacts on emergency operations (including water supply for fire suppression), and minimize any negative impacts. Fire hydrants within or adjacent to the Project Limits shall be kept accessible to fire apparatus at all times, unless the fire Department agrees otherwise in writing. For a related provision, see 107.10.

If the nature of the Work involves deep trenching, confined spaces, toxic chemicals, or any other unusual hazards that could require specialized rescue, the Design-Builder shall inform and cooperate with the appropriate fire Department, rescue service, or EMS.

The Design-Builder shall provide the Department with and post and maintain in conspicuous places within the Project Limits, a list containing:

- A. emergency response numbers with the names and telephone numbers (including cellular phone and pager numbers, if applicable) of local ambulance, police, fire, rescue, and hospitals;
- B. emergency response numbers for hazardous Materials spills;

- C. the Design-Builder's personnel with phone numbers who may be reached in case of emergency; and
- D. the Department's personnel with phone numbers who may be reached in case of emergency.

104.12.3 Joint Duty Regarding Safety. If the Design-Builder or the Department actually observes any person(s) performing Work in a manner that:

- A. the observing party actually knows is not in compliance with the MUTCD, the Design-Builder's TCP, an applicable OSHA requirement, or commonly accepted safety practices; and
- B. creates a clear and immediate risk of significant bodily injury to any person, then the observing party shall immediately notify such person(s) working in an unsafe manner and the other party to the Contract.

The Design-Builder and the Department agree to cooperate in eliminating all such unsafe conditions.

104.13 Traffic Control and Management. The Design-Builder shall provide continuous and effective traffic control in compliance with 619.

104.14 Other Federal Requirements. Unless otherwise provided in the RFP Documents, the Federal requirements contained in Appendix A to the Design-Build General Provisions are hereby incorporated into the Contract.

These provisions include Buy America requirements regarding steel procurement and Standard FHWA Contract Provisions (FHWA-1273) governing Non-discrimination, Non-segregated Facilities; Payment of Predetermined Minimum Wage, Statements and Payrolls; Record of Materials, Supplies, and Labor; Subletting or Assigning the Contract; Safety and Accident Prevention; False Statements Concerning Highway Projects; Implementation of Clean Air Act and Federal Water Pollution Control Act; Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion; and Certification Regarding Use of Contract Funds for Lobbying.

104.15 Project Design.

104.15.1 Design Documents. The Design-Builder shall prepare design documents in a format and in accordance with the standard requirements of the Department and the RFP. Design Documents shall include preparation and furnishing of plans, special provisions, reports, and other documents as required for the Work.

104.15.1.1 Format of Documents. Design Documents shall be prepared in the U.S. Customary (USC) units and shall follow the conventions used by the Department as specified in the Department Highway Design Manual and Bridge Design Manual or as described in the RFP.

104.15.1.2 Design Standards. Project design plans shall be prepared in accordance with the requirements and standards of the Department, utility and facility owners, and local agencies as required. The Design-Builder shall be responsible for identification and application of the standards to be used in preparation of design documents for layout and delineation format.

104.15.1.3 Codes, Standards, and Specifications. All Work, to the extent applicable, shall conform to the current editions of the publications identified in 106.12.2.2 of the Design-Build General Provisions and the applicable Supplemental Specifications and Special Provisions that are identified in the Appendices.

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For utility work and work within the railroad Right-of-Way, the Design-Builder shall be responsible for obtaining and ensuring adherence of design and construction to the respective standards.

104.15.1.4 Project Coordination. Throughout the duration of the Project, and, except for those coordination activities specifically reserved for the Department, the Design-Builder shall be responsible for coordination with local agencies, governmental approval agencies, community groups, adjacent landowners and businesses, and utility companies.

The Design-Builder shall review design plans, coordinate, and monitor adjacent work of any entity performing or proposing work on or adjacent to the Project and shall make the Department aware of any impacts such work would have on the Project.

104.15.1.5 Design Exceptions. The Design-Builder may propose design exceptions to required standards as part of an Alternate Technical Concept submittal. The Department may withhold approval of any and all design exceptions at its sole discretion. The Design-Builder shall allow sufficient time in the Project schedule to account for the design exception approval process and the possibility that the exception is not approved.

Final submittal of Design Documents shall include proper documentation of approval by the Department of any design exceptions.

The Design-Builder shall maintain an approved procedure for "Document Control". The Department shall have access to the tracked documents to confirm the latest revision is being supplied and constructed from.

The Design-Builder shall submit a final set of design documents (plans and special provisions) that is inclusive of early Released for Construction (RFC) plans. This submittal will be the final submittal and shall supersede all previous RFC packages.

104.15.1.6 Design Notes and Computations. Design notes and computations generated by the Design-Builder during preparation of the design documents (plans and specifications) shall become the property of the Department and be submitted to the Department with the final as-built plans.

At the Final Design Submittal, two final sets of the design notes and computations, sealed by a New Hampshire licensed Professional Engineer shall be submitted with the record set of plans, shop drawings, and special provisions.

Design notes and calculations, which shall be recorded on 8-1/2" x 11" computation sheets, appropriately titled, numbered, dated, indexed, and signed by the designer and checker. Computer output forms and other oversized sheets shall be folded or legibly reduced for submittal to 8-1/2" x 11" size. The data shall be bound in a hard-back folder for submittal to the Department along with an electronic copy in Adobe Acrobat format, and shall include the following data:

1. Field survey notes and computations;
2. Primary and Secondary Survey Control used for Design and Construction;
3. Geometric design computations for horizontal alignment;
4. Vertical geometry computations;
5. Traffic capacity analysis (as required);
6. Drainage computations;
7. Structural design computations for each structure;
8. Geotechnical Report and geotechnical analysis for each substructure unit;
9. Bridge LRFR load ratings;
10. Hydrology, hydraulic, and scour computations; and
11. Documentation of decisions reached resulting from meetings, telephone conversations, site visits, or otherwise.

104.15.1.7 Design Plans. The Design-Builder shall prepare design submittals for Department review in accordance with 104.15.2.

Plans shall be in accordance with the Department's Bridge Design Manual, Highway Design Manual, Standard Plans, and the Standard Details which may include, but not be limited to, the following:

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| 1. Title Sheet | 22. Span Framing Plans and Girder Elevations |
| 2. Key Plan, Standard Symbols and Index Sheet | 23. Bearings |
| 3. Typical Sections and Miscellaneous Details | 24. Diaphragms and Cross-Frames |
| 4. General Layout and Geometry | 25. Camber Diagrams and Camber Ordinances |
| 5. General Notes | 26. Bottom of Slab Elevations and Deflections |
| 6. Survey Plans | 27. Slab Reinforcing |
| 7. Construction Staging and Traffic Management Plans | 28. Typical Cross Section Diagrams |
| 8. Bridge Notes | 29. Special Embankment Construction |
| 9. Plan and Elevation | 30. Instrumentation – Layout, Plans and Details |
| 10. Roadway Profiles | 31. Drainage Details |
| 11. Boring Location Plan | 32. Railing and Barrier Details |
| 12. Boring Logs | 33. Expansion Joint Details |
| 13. Approach Cross Sections | 34. Bearing Details |
| 14. Abutment Plans and Elevations | 35. Reinforcing Steel Schedules |
| 15. Abutment Sections and Details | 36. Roadway Plans, Drainage Plans, Roadway Profiles, and Details |
| 16. Pier Plans and Elevations | 37. Cross Sections |
| 17. Pier Sections and Details | 38. Utility Plans and Details |
| 18. Pile/Drilled Shaft Group Plans and Elevations | 39. Street Lighting and Traffic Signal Plans |
| 19. Pile/Drilled Shaft Sections and Details | 40. Sign and Pavement Marking Plans |
| 20. Superstructure | 41. Standard Detail Sheets |
| 21. Superstructure Details | 42. Landscaping Plan |

104.15.2 Design Submittals and Reviews.

104.15.2.1 Design Submittals. Design plans may be developed in stages to allow construction activities to begin without having a full set of final design plans completed and approved. The Design-Builder has the option of submitting a complete set of bridge, roadway, traffic or other plans or a partial set of plans for RFC on particular highway or bridge elements. Should the Design-Builder choose to submit partial sets of plans, such staged design submittals shall consist of logically grouped Project elements that can be designed, reviewed, and constructed as a self-contained package. Breakout of design packages should be done so that an orderly progression of work can be scheduled by the Design-Builder. The Department shall review and concur with the proposed breakout of design packages that are intended to be Released for Construction (RFC). This proposed breakout shall be prepared as part of a Design Package Work Plan submitted in conjunction with the schedule of work required under 108.03. The Department will issue any objections to the Work Plan within seven (7) Days after receiving it from the Design-Builder.

The Design Package Work Plan shall identify the following:

1. The Project elements that will make up each Design Package, including physical and scope of work limits and interface points;
2. The sequencing and scheduling of the design and construction of each Design Package in relation to the Schedule of Work;
3. Planned stages for the Department's review of each Design Package, including:
4. the specific information the Department must review (e.g., preliminary design, final design, special provisions, etc.), including the percent complete represented by the submittal;

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- a. planned timeframe for the review (measured from Notice to Proceed), including the requested turnaround time from the Department (note that as a minimum, the Department will require seven (7) Days for design reviews);
 - b. any stakeholders that need to be consulted regarding the design; and
 - c. planned stage at which the Design Package can be Released for Construction.
5. Every Design Package shall also be submitted as an electronic file in Adobe Acrobat format.

The Design Package Work Plan shall be updated as necessary throughout the Project to provide the Department advance indication of when formal design reviews will take place. The Department will use this plan to allocate its design resources accordingly to expedite the review process.

104.15.2.2 Department Reviews. Department reviews of design plans and specifications will consist mainly of checks to ensure that Contract requirements and design criteria are being followed, and that the Design-Builder's Design Quality Management Plan (DQMP) is being followed as the design is developed. The reviews may, at the Department's discretion, include, but are not limited to, design plans, special provisions, reports, geotechnical information, and other relevant design information.

At its discretion, the Department may make periodic visits to the Design-Builder's project administration office and off-site design offices to discuss and verify the design and that the DQMP is being adhered to in these offices. The Department reserves the right to not give advance warning for these reviews. Should the Design-Builder request an oversight visit by the Department to an off-site office, the Design-Builder shall give the Department three (3) Days advance notice of its requested oversight visit.

104.15.2.3 Over-the-Shoulder Reviews. Over-the-shoulder reviews are intended to be reviews by the Department of design documents during the design process. These reviews will be conducted in the presence of the Design-Builder's design and construction personnel with the intent to minimize disruption of ongoing design efforts. The review may be of progress prints, computer images, draft documents, working calculations, draft special provisions, reports, or other design documents.

104.15.2.4 Design Submittal Review Process. Formal design package submittals shall be made to the Department. Formal review submittals shall be required at the fifty percent (50%) and eighty percent (80%) design development stage of any design package intended to be RFC. Plans and required QC/QA documentation shall be included with the submittal for review. Within seven (7) Days after the submittal has been made or a timeframe agreed upon in the Design Package Work Plan, the Department may submit to the Design-Builder comments on the design documents and QC/QA documents. The Design-Builder shall schedule a comment resolution meeting for all parties to discuss and resolve any comments.

The fifty percent (50%) review shall require that all comments from the design detail check completed by the Design-Builder be addressed and signed off by a senior experienced engineer as described in 106.11.3 and included with the fifty percent (50%) design submittal. The eighty percent (80%) submittal shall include all comments from the fifty percent (50%) review made by the Department addressed and initialed by a senior experienced engineer assigned to the Project as well as comments addressed and signed off from the Design-Builder's final detail check of the eighty percent (80%) plan submittal. The eighty percent (80%) submittal shall include special provisions and QC/QA regarding the special provisions for the plan set submitted. Failure to submit the appropriate QC/QA documentation with either the fifty percent (50%) or eighty percent (80%) submittal will result in a rejection of the submittal and require a re-submittal by the Design-Builder.

Upon successful completion of this process through the eighty percent (80%) design stage, the Design-Builder is then responsible for ensuring that all final comments to the plan package based upon the eighty percent (80%) review by the Department have been incorporated into the design documents and that required QC/QA has been completed prior to approving the plans and special provisions to be RFC.

104.15.2.4.1 Preliminary Design. The Technical Proposal will be considered the Preliminary Plan Submission for the bridge and highway.

104.15.2.4.2 Early Release for Construction. The Design-Builder has the option to provide ERC design plans for a particular bridge or highway element. Early release can be, for example, driving piles, constructing the footings and or foundation, and submission and approval of the superstructure in order to meet procurement schedules.

The Early Release process requires submission of the design plans of the particular bridge or highway element, associated computations, and QC/QA documentation as described in the Design-Build General Provisions and a description of the elements to be released. The plans and computations shall be sealed by a New Hampshire Licensed Professional Engineer. Plans should note that they represent an early release submittal and shall identify exactly what element is to be released. Any items shown on the design plans that are not to be RFC shall be clouded and cross-hatched within the clouds.

The Early Release for Construction process does not relieve the Design-Builder from the requirements of the Design Submittal Process indicated in Section 104.15.2.1 and Section 104.14.2.4. Specifically, a 50% Design Submittal and an 80% Design Submittal are still required.

Upon submittal of the design documents, the Department will determine if all the necessary documentation is present. If all the information is included in the submittal, the submittal will be reviewed. If all the required documentation is not included in the submittal, the Design-Builder will be asked to supply the necessary information. Review of the submittal will not commence until all of the required documentation has been submitted. After a seven (7) Day review period, the review team may notify the Design-Builder that the review is complete and the particular bridge or highway element may be RFC. If there are comments and questions, the comments will be provided to the Design-Builder. The Design-Builder is then responsible for ensuring that all final comments to the plan package based upon the review have been incorporated into the design documents and that required QC/QA has been completed prior to approving the plans and special provisions to be RFC. The Department may at its discretion require a re-submittal.

104.15.2.4.3 Release for Construction - Final Design Documents. RFC for the entire package consists of the final set of design plans, computations, special provisions, and QC/QA documentation for the complete design package. The plans shall be in accordance with the Bridge Design Manual and NHDOT's standard MicroStation/InRoads policies and practices. The plans and computations shall be sealed by a New Hampshire Licensed Professional Engineer.

Upon submittal of the design documents, the Department will determine if all necessary documentation is present. If all the information is included, the submittal will be reviewed. If all the required documentation is not included, the Design-Builder will be asked to supply the necessary information. Review of the submittal will not commence until all of the required documentation has been submitted. After a seven (7) Day review period, the Department will notify the Design-Builder that the review is complete and the final bridge design may be RFC. If there are comments, the comments will be provided to the Design-Builder. The Design-Builder is then responsible for ensuring that all final comments to the plan package based upon the review have been incorporated into the design documents and that required QC/QA has been completed prior to approving the plans and special provisions to be RFC. At its discretion, the Department may require a re-submittal.

104.15.2.5 As-Built Drawings. The Design-Builder shall submit As-Built drawings within thirty (30) days of receiving Final Acceptance from the Department stamped by the Design-Builder's Engineer.

104.15.3 Re-submittal Process. Re-submittal of any design review submittal may be required if deemed necessary by the Department. Each re-submittal shall address all comments from the prior review and corresponding QC/QA documentation shall be included. The Design-Builder shall not be entitled to any additional compensation or time extensions due to a re-submittal request by the Department.

The Design-Builder acknowledges and agrees that re-submittal of design packages including the final design plans may be required. The Design-Builder shall resubmit as many times as necessary to obtain concurrence from the Department regarding the design submittal.

104.15.4 Release for Construction. Upon completion of the eighty percent (80%) review comment responses to the design plans and special provisions for roadway or partial or final design plans and special

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provisions for bridge structures, a final QC/QA review shall be completed by the QC/QA Manager. When the review is completed the design package may be approved for RFC by the QC/QA Manager.

The Design-Builder is responsible to release the plans to field personnel and is responsible to ensure that there is a tracking mechanism in place so that all parties, field and office, have the same set of plans. The process for the final audit prior to RFC shall be included in the DQMP and shall include a method of tracking plans for RFC. The Design-Builder's construction QC/QA shall include the method for tracking plans RFC to field personnel.

104.15.5 Design Changes. The Department or the Design-Builder may initiate changes to the design after a design package has been RFC or to the final plan set. If these changes require amendments to environmental permits and/or additional Right-of-Way, they shall be addressed prior to implementing the change. If such design changes are at the sole option of the Design-Builder, they are not scope changes and shall not be cause for additional time or compensation.

Design changes to segments that have been RFC or to the final plans shall be approved in writing by the designer responsible for the original design or by a New Hampshire Licensed Professional Engineer of equal or greater experience than the original designer, if the original designer is no longer available. The changes shall be tracked and documented accordingly. This process shall be included in the DQMP and the Department shall be given the time specified for a review of RFC to comment on these changes.

All plans, special provisions and calculations prepared for design changes shall be sealed, signed and dated by a New Hampshire Licensed Professional Engineer who possesses the requirements stated in the preceding paragraph. The QA Manager shall certify through the audit process that the design change has been designed in accordance with the contract and appropriate design criteria and checked in accordance with the DQMP process for design. Once approved by the QA Manager, the change will be issued for RFC and must be tracked as described in 104.15.4. The Design-Builder is responsible to send the change to the Department and appropriate field personnel and ensure that it is tracked via the process as described in Section 104.15.4.

The Department reserves the right, but not the duty, to review and approve all design changes.

104.15.6 Administration and Coordination.

104.15.6.1 Project Administrative Coordination. The Design-Builder shall, at a minimum, provide project administrative coordination during the design phase and prior to any construction activity. Such coordination shall include the coordination of design and construction disciplines and the Department. To accomplish this task, the Design-Builder shall provide a central location in New Hampshire for the review and coordination of the Work. Such location shall include space for conference and office space for review of the designs by the Department.

When construction activities commence, the Design-Builder shall provide Project Administrative Coordination from an office located convenient to the Project site.

104.15.6.2 Project Administration Office. Provide a Project administration office meeting the requirements for a Type A Field Office as specified in Section 698 of the Standard Specifications. The Design-Builder shall notify the Department of the location of the Project Administration Office within two weeks after Notice to Proceed.

104.15.6.3 Briefings for Community Groups, Landowners, and Others. The Design-Builder shall participate to the extent requested by the Department in Department-conducted briefings to affected landowners along the Right-of-Way, community groups, local agencies, and other persons as designated by the Department. At these briefing meetings, the Design-Builder shall provide oral, written, and graphic information as reasonably requested by the Department.

The purpose of these briefing meetings is to keep the attendees informed of the Project's progress and to discuss key elements of design and construction as they emerge. Information to be provided by the Design-Builder shall include design issues affecting local streets and utilities, street and roadway detour design and

implementation, scheduling of construction, hours of construction work, haul routes, methods to minimize noise and dust, landscaping and environmental mitigation measures, and other relevant topics. The Design-Builder should be prepared to present information on Project status and schedule reports and plans and exhibits showing slope grading, bridge structures, retaining walls, as well as other relevant mitigation, aesthetic, and construction topics as requested by the Department. These meetings will be informational in nature and will not be for the purpose of seeking any approvals from the attendees. However, these meetings may result in follow-up meetings with the attending parties that may be used for further clarification.

104.15.6.4 Meeting Minutes. The Design-Builder shall attend all meetings called by the Design-Builder, Department or its authorized representatives, and third parties (including Utility companies, municipalities and regulatory agencies) as appropriate. For all meetings at which the Design-Builder is required to be in attendance, the Design-Builder shall submit to the Department objective draft meeting minutes within five (5) Days after the meeting. Final meeting minutes incorporating any Department comments shall be submitted to the Department within five (5) Days after receipt of the Departments comments on such draft meeting minutes, as applicable. Draft meeting minutes may be submitted to the Department electronically with final meeting minutes submitted as hard copies. The Design-Builder shall be responsible for the distribution of final meeting minutes to all meeting attendees. Excluded from this requirement are internal meetings between the Design-Builder's team members.

At a minimum, all meeting minutes shall contain a complete list of attendees (including their affiliations, telephone numbers, and e-mail addresses), descriptions of issues discussed, decisions made, direction given, and remaining open issues (including identification of the party responsible for follow up and the target date for resolution).

104.15.7 Traffic Engineering.

104.15.7.1 Traffic Management Plan. The Design-Builder shall develop a Traffic Management Plan detailing all phases of work, proposed road closures, maintenance of traffic through the work zone, and all construction accesses. The Traffic Management Plan shall be in accordance with the Department's and MUTCD standards and shall be submitted in advance of construction to the Department for review and concurrence prior to implementation.

The Plan shall be prepared and implemented to promote the safe and efficient movement of people, goods, and services through and around the Project while minimizing impacts to local residents, businesses, commuters, and First Responders.

The plan shall specifically identify any planned closures, either full or partial, of any existing bridge, along with traffic detours and supporting traffic analyses. Any such closure shall be preceded by a concerted public information effort to communicate closure information to all affected parties. Supplemental Liquidated Damages, will apply as specified in the Project Requirements in the RFP.

104.15.7.2 Signs: Guide, Warning, and Regulatory. The Work shall include traffic sign plans and installation as required by the Department and MUTCD criteria. Design plans shall include a layout of the new permanent signing required, a sign legend, structural and foundation details and associated details for manufacturing and installation. The Design-Builder is also responsible for all design and construction related to modifying existing signs on the approaches and adjacent roadways due to the construction of the Project.

The Design-Builder shall be required to provide all sign supports and foundations in accordance with AASHTO Standard Specifications for Structural Supports for Highway Signs and Luminaires, and Traffic Signals. The Design-Builder shall also provide protection for the sign structures as required. Requirements for electric service shall be coordinated with the local electric utility and provided by the Design-Builder.

104.15.7.3 Pavement Markings. The Design-Builder shall be required to design and install pavement markings in accordance with the Department's, applicable municipalities, and MUTCD's standards and specifications.

Temporary pavement markings used for traffic management shall be designed and installed in accordance with MUTCD standards. The Design-Builder is responsible to maintain these temporary pavement markings such

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that they are visible to traffic at all times and do not cause driver confusion through any portion of the Project or any area directly adjacent to the Work area. If needed, temporary pavement markings may extend past the physical work limits and it is the responsibility of the Design-Builder to satisfactorily re-stripe these areas upon completion of the Project

104.15.7.4 Traffic Signals. If required, the Design-Builder shall be responsible for performing all traffic signal design and construction work in accordance with the Department's and MUTCD standards and specifications. All signals designed and constructed will have the proper traffic signal permits.

Traffic signalization plans for both temporary and permanent installations shall include layouts showing locations of traffic signal appurtenances, system coordination detection plans, signal controllers and lamps, interconnect details, signal phasing and timing, specifications and item lists indicating all material and equipment, and all structural and foundation requirements. All new traffic signals shall be interconnected. The Design-Builder shall provide all traffic data and analysis used to prepare the signal timing and phasing plans. Design-Builder shall also coordinate its power needs with the local electric utility company, and any requirements for electrical service shall be provided by the Design-Builder.

104.15.7.5 Traffic Studies. The Design-Builder shall provide the required traffic analysis to support all proposed intersection designs and traffic signal layouts and timing. The Design-Builder is also responsible for performing all analyses necessary to support proposed traffic management strategies to be implemented during construction. The Department must approve all proposed traffic management strategies prior to implementation by the Design-Builder.

104.15.8 Geotechnical Design and Construction.

104.15.8.1 Supplemental Boring Program. The Department recognizes that additional geotechnical information is necessary to finalize the Project designs. Therefore, if specified in the Project Requirements in the RFP, the Department will conduct a Supplemental Boring Program as part of the procurement process that will allow the Bidders to request additional borings and geotechnical testing. The results of the Supplemental Boring Program will be summarized in a Supplemental Geotechnical Data Report provided by the Department on or about the date specified in the Project Requirements.

For the Supplemental Boring Program, each Bidder will be allowed to request a maximum number of additional borings as specified in the Project Requirements.

Each of the Bidder's borings will be terminated with an approximately ten (10) foot long NQ bedrock core. At each boring location, Standard Penetration Tests (SPTs) will typically be conducted with a twenty-four (24) inch split spoon sampler at five (5) foot intervals. If soils at a boring location are primarily silt and clay, field vane shear tests (VSTs) will be performed at five (5) to fifteen (15) foot intervals as appropriate.

Each Bidder is allotted additional geotechnical laboratory testing services to assist them in developing their designs, and their requested boring program shall also include a schedule of standard soil and rock laboratory tests requested by boring and depth. The allotted types and number of standard soil and rock laboratory tests for each Bidder are as specified in the Project Requirements. The Department will not conduct soil or rock tests that are not listed.

The Department will exercise judgment in revising lab testing requests based on actual soil and rock samples recovered from supplemental borings. Bidders will be notified for concurrence regarding any need to revise soil or rock lab testing requests.

A blank Supplemental Boring Request Form is provided in the Appendix to the Project Requirements for the Bidder's use. Each Bidder is responsible for submitting its requested boring program detailing the locations for the borings and its requested laboratory testing program to the Department on the form provided. The Supplemental Boring Request Form shall be delivered to the Department's Department Representative as identified in the Project Requirements by the time specified on the date specified in the Project Requirements. Late submittals will not be accepted.

Borings proposed by different Bidders within forty (40) feet of each other will be averaged to one proposed location. If two or more mutually exclusive test samples are selected for the same location, the Department will

make a reasonable effort to collect an adjacent or nearby sample of similar material from the same boring to accommodate both requests. If a useable sample (e.g., “undisturbed” or sufficient volume) cannot be obtained from the requested depth, the Department will make a reasonable effort to perform the test on an adjacent or nearby sample of similar material from the same boring. Soon after receipt of all Supplemental Boring Requests, a master list of borings will be provided to the Bidders. Boring locations may need to be relocated due to site constraints so that conventional truck mounted rigs, ATV rigs, or spud barges may be used to drill the borings. The Department reserves the right to relocate borings due to site constraints. The Bidders will be notified for concurrence regarding any boring relocations.

Mobilization for this Supplemental Boring Program is scheduled to occur on or about the date specified in the Project Requirements. A Supplemental Geotechnical Memorandum with all final boring logs and laboratory test results will be available to all Bidders on or about the date specified in the Project Requirements. Draft boring logs from all borings requested by all Bidders will be provided to all Bidders as the data is being developed.

104.15.8.2 Final Geotechnical Investigations. The Department does not necessarily consider the Supplemental Boring Program and corresponding Supplemental Geotechnical Data Report as final geotechnical explorations for the project. Following award of the contract, the Design-Builder shall conduct sufficient subsurface investigations to satisfy AASHTO LRFD Article 10.4 and LRFD Table 10.4.2-1, as needed. The Department further anticipates that the Design-Builder will conduct additional laboratory soil and rock tests to supplement those provided as part of the Supplemental Boring Program as appropriate for their designs.

104.15.8.3 Use of Geotechnical Information. The use of the geotechnical information provided by or referenced in this document, or encountered elsewhere is at the sole risk of the Bidder. Interpretations and analyses based upon any geotechnical information are at the sole risk of the Bidder. By submitting a Proposal, the Bidder is acknowledging that it has viewed the site, has read and understood supporting documents, and is willing to rely upon its own site understanding in proceeding with the Project. Furthermore, by submitting a Proposal, each Bidder certifies that, if awarded the Contract, it will not seek recourse with the Department for changed or unforeseen subsurface conditions except as provided in 104.2 of the Design-Build General Provisions.

104.15.8.4 Instrumentation Programs. If an instrumentation program is required to monitor vertical and/or lateral embankment deformations, soil pore-pressures, and/or structure movements, the instrumentation program shall be submitted with the Geotechnical Design Reports, for review and approval by the Department. The instrumentation program shall be developed by a New Hampshire Licensed Professional Engineer with at least five (5) years of instrumentation experience.

The instrumentation program shall establish threshold movement of instruments from baseline conditions, such as allowable pore pressure increases or lateral deformations. The instrumentation plan shall also describe subsequent corrective actions that shall be taken if threshold movement(s) is/are exceeded.

If an instrumentation program is required, no construction shall be allowed until baseline pore pressures or movement data are collected.

The Design-Builder shall not decommission the instrumentation program at any time during the Project construction duration. The instrumentation shall be left in working condition and turned over to the Department, along with readout equipment at the completion of the Project.

The Department shall require that the Design-Builder perform a pre-construction building survey of any structure within two hundred (200) feet of the construction. In addition, the Design-Builder shall implement the approved instrumentation program. During construction, reduced instrumentation data shall be submitted to the Department for review within forty-eight (48) hours of readings, and staged construction of fills shall not proceed prior to submittal of instrumentation data and review and approval by the Department.

104.15.8.5 Geotechnical Design Reports. The Design-Builder will prepare fifty percent (50%), eighty percent (80%) and one hundred percent (100%) design development stage Geotechnical Design Reports, which will be reviewed as specified in the Design Submittal Review Process described in 104.15.2. The Geotechnical Design Reports shall address all of the requirements of the fifty percent (50%) design submittal, the eighty percent (80%)

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design submittal, and the one hundred percent (100%) design submittal, plus all final design recommendations, construction considerations, special provisions and calculations.

The Design-Builder shall submit Geotechnical Design Reports that meet the requirements of the design submittal process described in 104.15.2. Separate Geotechnical Design Reports may be submitted to accommodate a variety of pier, abutment or foundation designs, as subsurface conditions vary across the site. The fifty percent (50%) design stage Geotechnical Design Report(s) shall include, but is not limited to, the requirements listed below:

1. Interpretation and analysis of soil and bedrock conditions based on the geotechnical information available and other investigations conducted by the Bidder.
2. Design and construction recommendations for the following, as applicable:
 - Bridge substructures: spread footing, and/or deep foundation.
 - Retaining walls: type, foundations, settlement, backfill
 - Embankment slope stability and special embankment construction: soil modification, lightweight fills, staged construction
3. Performance criteria of structure foundations and highway embankments - total and differential settlement of retaining walls, highway embankments, bridge foundations (lateral and axial).
4. Construction inspection and quality control programs, including load testing programs to verify design resistances and installation procedures for piles and/or drilled shafts, if used.
5. Instrumentation programs, if necessary, to monitor embankment or substructure response to construction activities. Instrumentation programs shall establish threshold movement of instruments from baseline conditions. The instrumentation plan shall also describe reading frequencies, reporting protocols, and subsequent corrective actions that shall be taken if threshold movement(s) is/are exceeded.
6. Construction considerations for all of the above geotechnical elements.
7. Appendices
 - Boring logs
 - Laboratory test results
 - LRFD geotechnical analyses and design calculations
 - Project specific special provisions
 - Other

If the Design-Builder determines that preconsolidation is required due to underlying clay deposits (e.g., in embankments), evaluation of changes in clay shear strengths during staged construction and minimum surcharge fill heights should be performed in accordance with accepted procedures, such as the methods described in Ladd, 1991 ("Stability Evaluation During Staged Construction", Journal of Geotechnical Engineering, ASCE, Vol. 117, April, pp. 540-615) and Stewart et al, 1994 ("Settlement of Large Mat on Deep Compressible Soil", Proceedings of Settlement '94 Conference, ASCE Specialty Geotechnical Conference, Special Publication No. 40, Vol. 2, pp. 842 to 859), respectively.

104.15.9 Bridge Design and Construction.

104.15.9.1 Design Requirements. The bridge and its foundations shall be designed in accordance with the most current AASHTO LRFD Bridge Design Specifications and the Bridge Design Manual (BDM) at the date of the Technical and Price Proposal submission. If required, seismic design shall be in accordance with the

AASHTO guide specification for LRFD Seismic Design, 1st Edition or the most current AASHTO LRFD Bridge Design Specifications.

104.15.9.2 Scour Design Requirements. The bridge shall be designed to withstand scour in accordance with the BDM.

104.15.9.3 Geometric Requirements.

1. Horizontal Location and Profile shall meet the requirements identified in the Project Requirements in the RFP.

2. Typical Bridge Cross-Section:

Provide all bridge cross-section elements as identified in the Project Requirements in the RFP. Account for any additional width necessary to accommodate additional lane widths or tapers required for the approaches to the bridge.

104.15.9.4 Additional Design and Performance Criteria. Unless otherwise specified in the Project Requirements in the RFP, the Design-Builder shall meet the following requirements, as applicable:

1. New bridge structures and their foundations shall be designed to ensure a minimum design life of seventy-five (75) years and require minimal maintenance over the design life.
2. All construction materials shall be in accordance with the Department's Standard Specifications. No experimental or previously unapproved materials shall be used without prior written approval by the Department.
3. All bridge superstructures, joints, bearings, and restraints shall be made accessible for long-term maintenance and inspection. The Design-Builder shall consider items such as: tie-off points for inspection of the bridge underside via boat, paths/access to abutment seats, jacking points/locations for ease of elastomeric bearing replacement, and other similar measures.
4. The superstructure for any replacement bridge shall be horizontally and vertically restrained against hydraulic, debris, and/or ice impact loads in the event flood water and/or ice elevations rise above the superstructure low point.
5. Corrosion resistant reinforcing systems shall be used in all areas specified in the BDM.
6. New bridge superstructures shall be designed to minimize or eliminate roadway joints in the deck.
7. No longitudinal expansion or construction joints shall be allowed in the deck.
8. If weathering steel girders are proposed, then:
 - a. The girder ends and bearing stiffeners, bridge shoes, and cross frames at the expansion joint shall have a steel coating system applied as specific in the BDM and in accordance with an approved zinc-rich primer;
 - b. the design shall incorporate means to prevent staining on the piers from the weathering steel; and
 - c. FHWA Technical Advisory T5140.22, dated October 3, 1989, shall be followed for direction on minimum vertical clearance over typical water levels.
9. Substructure design shall effectively resist all applicable ice loadings, with the upstream nosing of the piers designed/shaped to effectively break-up or deflect floating ice and debris, with suitable nosing protection provided.
10. Cofferdams shall be utilized to construct abutments and piers in the dry, as well as confine sediment and debris generated during construction.

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11. Snow fencing is required with open bridge rails over all roads, trails, or railroad tracks.
12. Spacing of bridge drains, if required, shall be designed to keep all accumulated water out of the travel lanes.
13. No bridge drains shall be allowed within any U.S. Coast Guard regulated navigational channel.
14. Permanent bridge railings and approach/transition railings shall meet the requirements of the Bridge Design Manual and FHWA's requirements as defined by NCHRP 350 for crash tested barriers. All temporary barriers to be installed on the new or existing bridge to protect the work zone shall be attached to the bridge superstructure in accordance with crash tested details.
15. If piles are designed for bridge foundation support, the Design-Builder may not install the piles until at least ninety percent (90%) of primary consolidation of compressible soils is complete.
16. All bearings shall be reinforced elastomeric bearings or High Load Multi-Rotational (HLMR) bearings, as required by the proposed superstructure design.

104.15.9.5 Removal of the Existing Bridge. Removal shall conform to relevant portions of the standard Specifications and to the extent specified in the Project Requirements in the RFP.

Unless otherwise specified in the Project Requirements, the existing bridge shall be removed by and become the property of the Design-Builder.

When the Project Requirements identify the existing bridge as containing steel portions that are coated with a lead-based paint system, the Design-Builder shall be responsible for the containment, proper management and disposal of all lead-contaminated hazardous waste generated by the process of demolishing the bridge. The Department will assume generator responsibility for any hazardous waste generated as a result of the removal process at the bridge site; this waste shall be transported and managed by a NHDOT approved vendor. The Design-Builder is responsible for implementing appropriate personal protection standards mandated by OSHA related to this process.

Once the existing bridge is removed from the bridge site, the Design-Builder is solely responsible for the care, custody, and control of the components of the existing bridge - any hazardous waste generated as a result of storage, recycling, or disposal of the bridge components, including the lead-coated steel, shall be the sole responsibility of the Design-Builder. Payment for all labor, materials, equipment and other costs required to remove and dispose of the existing bridge will not be made separately, but shall be included in the Lump Sum Price of the Project.

The Design-Builder shall transmit a Bridge Removal Plan to the Contract Administrator, at least ten (10) Days prior to the start of work on this item. This plan shall outline the methods and equipment to be used to remove and dispose of all materials included in the existing bridge. Part of this plan must include the use of a NHDOT approved vendor for the transport and management of any hazardous waste generated at the bridge site. No work related to the removal of the bridge shall be undertaken by the Design-Builder until the Department has reviewed the Bridge Demolition Plan for appropriateness and completeness. Payment for all work necessary for developing, submitting and finalizing the Demolition Plan will not be made separately, but shall be included in the Lump Sum Price of the Project.

Removal requirements may change due to permit or 106/4(f)/NEPA stipulations.

104.15.10 Retaining Walls. All retaining walls shall be designed in accordance with AASHTO's LRFD Bridge Design Specifications and the Special Provisions listed in Appendix.

For continuity/aesthetic reasons, any retaining wall designed for this Project shall fit into one of the following categories, unless otherwise specified in the Project Requirements in the RFP:

1. Reinforced concrete cast-in-place construction,
2. Precast Concrete Modular Gravity (PCMG) walls as described in (PCMG walls shall not support bridge abutment foundations),

3. Precast Concrete Block Gravity (PCBG) walls (PCBG walls shall not support bridge abutment foundations, or
4. Mechanically Stabilized Earth (MSE) retaining wall system. MSE walls shall not be used where the wall will be exposed directly to flowing water for all flow conditions.

Wall types and aesthetic treatments shall be reviewed and approved as part of the fifty percent (50%) Design Submittal prior to beginning final design.

104.15.11 Drainage.

104.15.11.1 Objectives. The Design-Builder shall provide a well-drained corridor and a safe environment for those that use and maintain the facility. Work for all drainage structures and appurtenances shall adequately address functionality, durability, ease of maintenance, maintenance access, safety, aesthetics, and protection against vandalism. In fulfilling the requirements for drainage, the Design-Builder shall abide by and fulfill the requirements related to drainage features or systems while at the same time meeting the requirements of other required design elements on the Project.

The Design-Builder shall be aware and fully comply with federal, state, and local laws related to drainage design, as well as all applicable Governmental Approvals, including Environmental Approvals, and shall perform the Work such that there will be no substantial adverse effects on adjacent properties or drainage systems.

104.15.11.2 Drainage Design. The Design-Builder shall be responsible for drainage design, including hydrologic and hydraulic analysis as required, locating, sizing, and constructing all temporary and permanent drainage facilities. The design documents shall include a Final Drainage Report including calculations, storm drain plans, profiles, details, and site protection during the Work. Surface drainage shall be designed to accommodate anticipated settlement in embankments and operate effectively. The Design-Builder shall confirm applicable standards with the Department and any State or local government agency.

The drainage systems for the Project shall be designed to accommodate the surface runoff generated by the new facility, offsite drainage currently being accepted into the existing drainage system, and seasonal high water flooding.

104.15.12 Survey. The Design-Builder shall furnish all additional surveys necessary to complete the Work in conformance with this Contract, the Department's Survey Manual, Department Specifications, and any local agency requirements. Survey shall be under the supervision of a Licensed New Hampshire Surveyor to meet minimum Third-order, Class I survey accuracy and procedures (Horizontal: 1 in 10,000, Vertical: 0.05 ft (2.0 mm) $\times \sqrt{\text{distance in miles (kilometers)}}$). Available survey information has been provided on the Project website or ftp site.

The Design-Builder shall bear sole responsibility for the accuracy of additional survey data used in the Design. The Design-Builder shall review existing survey data and determine the requirements for new and additional survey and mapping data. The Design-Builder shall be responsible for the final precision and accuracy of all survey and mapping work. All field notes are to be recorded in Field Survey Notebooks that will be turned over to the Department at the end of the Project.

104.15.12.1 Survey Services and Survey Deliverables. Survey documents shall be a part of the design documents and shall include:

1. A horizontal and vertical coordinate listing, monument description, and location description of all primary and secondary survey control points installed, marked, and referenced along with a listing of the existing control used to create the installed control points;
2. Survey notes, plans, and calculations completed as the Work progresses and all originals and two copies of each survey document;

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3. Construction staking plans. Construction survey notes shall be provided to the Department.
4. Construction staking as deemed appropriate by the Design-Builder;
5. Original diary forms and related original survey record keeping; and
6. Construction staking survey control data key map and line index plans (to be included in the Construction Plans).

104.15.12.2 Horizontal Control. All horizontal data for the Project shall be in the New Hampshire State Plane Coordinate System (SPCS) on the North American Datum of 1983(96), US Survey Feet, (NAD 83(96)).

104.15.12.3 Vertical Control. Vertical control for the Project shall be established on the North American Geodetic Datum of 88, US Survey Feet, (NAVD88).

104.15.12.4 Electronic Field Book (EFB) Data. The use of an EFB to collect and store raw data shall follow the procedures described in the Department's Survey Manual. Original raw data shall always be preserved, and any changes or corrections made to field data, such as station name, height of instrument, or target shall be documented. Raw field data shall also be preserved in hard copy output forms similar to how a conventional field book is preserved.

104.15.12.5 Survey Notebook Data. Field Survey data and sketches which cannot be efficiently recorded in the EFB should be recorded in a Field Survey Notebook furnished and stored with copies of electronic data.

104.15.12.6 Electronic Deliverables. All collected survey data shall be Digital Terrain Model (DTM) and be created and submitted using the latest version of Microstation/InRoads to the Department.

104.15.12.7 Permanent Survey Control Network. The Design-Builder shall establish and maintain permanent survey control network. The Design-Builder shall replace all existing survey monuments and control points disturbed or destroyed by the Design-Builder and shall place new survey monuments and control points as required to accomplish the Work. In addition, the Design-Builder shall install permanent survey control points for roadway improvements as may be requested by local agencies.

The Design-Builder shall make all computations necessary to establish the exact position of the control points based on the primary control. A listing of all coordinate values, original computations, survey notes, and other records made by the Design-Builder shall be supplied to the Department as a condition to Final Acceptance. The Design-Builder shall replace any control points requiring replacement as a condition to Final Acceptance.

104.15.13 Utilities.

104.15.13.1 Scope of Work. Unless otherwise specified in the Project Requirements in the RFP, construction of the Project will affect utilities. The Design-Builder shall coordinate the utility work to ensure that utilities are properly identified and that all necessary relocations occur so as to enable the Design-Builder to achieve completion of the Project in accordance with the Contract. Services include: the identification of existing utilities requiring relocation and notifications to and negotiation of design and agreements with Utility Owners.

The design shall address the manner in which utilities will be maintained and/or temporarily or permanently relocated. Utilities may be supported or integrated onto the new bridge.

104.15.13.2 General Design-Builder Responsibilities. The Design-Builder shall ensure that all utility work is completed.

The Design-Builder shall certify in writing to the Department that all necessary arrangements have been made for proper coordination of utility work with physical construction in accordance with 110.4.6.

The Design-Builder shall carry out all work carefully and skillfully and shall support and secure its work so as to avoid damage to all utilities. Flow in drains, sewers and water supply lines shall be satisfactorily maintained. Unless otherwise directed by the Utility Owner, the Design-Builder shall not move or remove any utility without

the Utility Owner's written consent. At the completion of the Work, the condition of all utilities shall be as safe and permanent as before. If any utilities are damaged by the Design-Builder, it shall notify the affected Utility Owners, which may cause the damage to be repaired at Design-Builder's expense.

104.15.13.3 Ascertaining the Location of Utilities. The Design-Builder bears full responsibility for ascertaining, at its own expense, the existence and exact location and size of any utility to be relocated or otherwise impacted on either a temporary or permanent basis for the Project. If a surface inspection of the area shows the existence of or gives the Design-Builder cause to suspect the existence of any previously unidentified utilities, or the Design-Builder otherwise has cause to suspect that other previously unidentified utilities exist, then Design-Builder shall undertake all appropriate investigations by contacting Utility Owners and conducting field investigations at the expense of the Utilities as necessary to verify the existence, location, and size of such utilities.

104.15.13.4 Commencement of Utility Work. Subject to the availability of Right-of-Way, the Design-Builder may cause the Utility Companies to start their work at any time following the date specified in the Notice to Proceed or after approval by the Department. The Design-Builder is responsible for causing the utility work to be completed in order to permit construction of the Project according to the construction schedule, as approved by the Department.

104.15.13.5 Inspection/Approval of Utility Design and Construction. The Design-Builder shall permit Utility Owners to inspect utility work.

104.15.13.6 Policy of Avoiding Relocations. The location of utilities and potential impact of relocations shall be considered by the Design-Builder in developing changes to the Department-supplied information with the following goals:

1. avoiding relocations to the extent practicable;
2. if a relocation is not reasonably avoidable, protecting the utility in place to the extent practicable; and
3. otherwise minimizing the potential costs and delays relating to relocations to the extent practicable.

104.15.13.7 Scheduling and Cost Risks. Refer to 109.04 of the Design-Build General Provisions. For this Project, Utilities shall be considered a third party.

104.15.13.8 Utility Diaries and As-Built Plans. The Design-Builder shall maintain utility diaries and a set of as-built utility maps that are clearly legible, accurate, and complete. The standards for preparation of all Design Documents relating to Utilities and final as-built plans shall conform to all applicable Department requirements.

104.15.13.9 Agreements. The Design-Builder shall write all agreements as three-party agreements for the Department, the Utility Owner, and the Design-Builder.

104.15.14 Railroad Coordination.

104.15.14.1 Railroad Flagging and Other Services. The Design-Builder shall be responsible for requesting and using flaggers furnished by the Railroad when working on or near the tracks, unless such requirements are waived by the Railroad. If the Work would cause a hazard to the safe operation of the trains or other railroad facilities (including communication lines) on railroad premises, the Railroad may provide the necessary qualified employees to protect its trains and other facilities at the Design-Builder's expense.

104.15.14.2 Agreements. The Design-Builder shall write all agreements as three-party agreements for the Department, the Railroad, and the Design-Builder.

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104.15.15 Right-of-Way.

104.15.15.1 Right-of-Way Acquisition Services. Unless otherwise specified in the Project Requirements in the RFP, the Design-Builder shall provide Right-of-Way acquisition services for properties not acquired by the Department prior to Award, including final Right-of-Way mapping, appraisals, and negotiations.

1. The Design-Builder will be responsible for delivering Right-of-Way functions described above in full compliance with the implementing regulations of 49 CFR Part 24, 23 CFR Part 710, the NHDOT Right-of-Way Manual, and in compliance with New Hampshire State Law.

Any conflicts discovered by the Design-Builder between written authorities such as what is stated in the RFP and the NHDOT Right-of-Way Manual or other implementing regulations must be brought to the attention of the Department's Right-of-Way Manager designated for the project through the Department Representative.

2. A resource plan for property related services for this project must be submitted to the Department's designated Right-of-Way Manager for NHDOT Property Office review and approval before the Design-Builder performs any Right-of-Way work on the project. The resource plan must identify employees or subcontractors who will be performing the Right-of-Way services required for the project and further described in the Department's Right-of-Way Manual. The Property Office will determine if the firms or persons in the plan are qualified for the associated assignments. People and companies on the Department's current pre-qualified consultant firms list are qualified generally, and may or may not be well suited for all assignments. Any persons or companies not pre-qualified must meet the Department's prequalification requirements for those services and be on the Design-Builder's approved resource plan before commencing work.
3. The Design-Builder shall submit a Right-of-Way action schedule to the Department Representative and Right-of-Way Manager for review and approval before initiation of Right-of-Way acquisition. This will include:

If applicable, a relocation plan describing how the Design-Builder will comply with the requirements of the Department's Right-of-Way Manual. The plan will also include time estimates for relocation based on individual displace needs, housing availability, and regulatory notice to move requirements.

Identification of buildable segments of Right-of-Way that may proceed to construction when Right-of-Way acquisition and relocation are complete and independent of Right-of-Way status on other project segments.

A proposed time schedule that includes prioritization of activities and performance of acquisition and relocation.

A cost estimate for performance of each Right-of-Way phase or function for which the Design-Builder will be responsible.

4. The NHDOT Bureau of Right-of-Way will determine relocation benefit amounts, and any proposed use of Last Resort Housing for displacees.
5. The Design-Builder will develop a Right-of-Way tracking system to provide ongoing project status of appraisal, acquisition, and relocation for each parcel. This system will include an up to date electronic contact report which includes summaries of discussions and correspondence with individual property owners.

6. The decision to advance a segment or phase to the construction stage shall not impair the safety of or in any way be coercive in the context of 49 CFR 24.102(h) with respect to unacquired or occupied properties on the same or adjacent segments of the project.

In accordance with Title 23 CFR Section 710.313, a design-build project may be authorized for construction in phases or segments as Right-of-Way for an individual property or group of properties are available. A project phase will be authorized under the same conditions of Right-of-Way certification as are required for traditional contract projects as described in the Department's Right-of-Way Manual. Prior to physical work being performed, the Department must have legal possession of all property for the phase of construction and occupants and personal property must have vacated.

104.15.15.2 Property Acquired by the Department. Parcels where the Design-Builder is unable to reach an amicable settlement with the owner will be acquired through Eminent Domain procedures. This process will be conducted by the Department with full coordination and support by the Design-Builder. The Design-Builder will begin negotiations and acquisition. If unable to acquire amicably, the appraisal, complete title package, and condemnation plans will be provided to the Department for use in the Eminent Domain process. The Department will be responsible for completing the administrative process necessary for land acquisition and for acquiring the land or interests in lands that are required for the Project. After the Department has approved the final ROW plans and appraisals submitted for a segment or construction phase, the Department will be provided six (6) months to obtain possession of the properties identified for acquisition in the segment or phase. If the Design-Builder requires Right-of-Way on properties for which the Department cannot exercise eminent domain, more time may be required for those properties to be acquired. The Design-Builder shall be prepared to assist the Department during the negotiation process.

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SECTION 105 -- CONTROL OF THE WORK

105.01 Authority of the Department and Quality Assurance Manager. The Design-Builder's Quality Assurance Manager will decide all questions regarding the quality and acceptability of materials furnished, work performed and the rate of progress of the Work. The Department will decide all questions regarding the interpretation of the Contract, and the acceptable fulfillment of the Contract by the Design-Builder.

The Department or Quality Assurance Manager will suspend the Work, wholly or in part, for such periods as may be necessary due to the Design-Builder's failure to correct conditions unsafe for the Project personnel or general public, or carry out provisions of the Contract, or carry out orders of the Department.

Work may also be wholly or partially suspended for periods necessary due to existing or forecasted unsuitable weather, or for conditions considered unsuitable for the prosecution of the Work such as hazardous materials, directives of the New Hampshire Department of Environmental Services, Air Resources Division, implementing emergency episode procedures, or any other condition or reason deemed to be in the Department's interest. For suspensions due to these causes re to 104.02.

105.02 Plans and Working Drawings. Plans shall be supplemented by Design-Builder-prepared working drawings as found necessary to control the Work and its prosecution. Working drawings consisting of details that are not included in the Plans but required for the Work shall be reviewed and approved by the Design-Builder. Manufacturer's engineering data for prefabricated material, including that for falsework and forms, shall be furnished with each set of working drawings.

The Design-Builder shall prepare in writing a review procedure for Working Drawings that shall include the review of drawings and engineering computations for conformance with Design Documents, Specifications, and Contract Documents. The Department will review and concur with the written procedure prior to the Design-Builder reviewing any working drawing. The Department's concurrence of the review procedure shall not relieve the Design-Builder of the responsibility for overall correctness of Working Drawings including engineering and mathematical computations, shop fits, and field connections.

The Department may at any time request documentation from the Design-Builder that the Design-Builder is following the review procedure as submitted to and concurred with by the Department.

When Design-Builder reviews are complete, the Design-Builder shall furnish the Department with one set of reproducible copies of the final Working Drawings prior to assembly fabrication or construction of the element(s) in the working drawings.

The Department reserves the right to review working drawings at any time. Such review shall not relieve the Design-Builder of the responsibility for the Design-Builder review or for the overall correctness of working drawings including engineering and mathematical computations, shop fits, and field connections.

105.03 Conformity with Plans and Specifications. Work performed and materials furnished shall be uniform in character and meet the Contract dimensions and material requirements according to tolerances specified in the Contract. If tolerances are specified, deviations beyond the specified limits will be unacceptable. When tolerance limits are not specified, and only single dimensions are indicated, such dimensions are to be regarded as nominal dimensions.

If the materials furnished, work performed, or the finished product does not conform with the Contract, but adequately addresses the design purpose, the Department and Quality Assurance Manager will jointly determine the conditions under which the Work will be accepted and allowed to remain in place unless there are other provisions in the Contract that provide for this determination. Where this determination is made by the Department rather than Contract provisions, the Department will document the basis of acceptance by Contract Revision. The revision will provide for an appropriate adjustment in the Contract Amount for such work or materials as necessary to support the Department's determination.

If the materials, work performed, or the finished product do not conform with the Contract and results in an unsatisfactory or unacceptable product, the work or materials shall be removed and replaced or otherwise corrected to the satisfaction of the Department or Quality Assurance Manager at the Design-Builder's expense.

If there are provisions in the Contract (QC/QA provisions) for the acceptance of material or work that is not in full compliance with the minimum requirements stated, the use of pay adjustment factors reflecting the payments

to be made for the Work or Materials will be included in the applicable Subsection concerning method of measurement and basis of payment or in a separate Subsection.

105.04 Blank

105.05 Cooperation by the Design-Builder. The Design-Builder shall keep one set of RFC Plans on the Project at all times.

The Design-Builder shall give the Work the constant attention necessary to facilitate progress, and shall cooperate with the Department and other Contractors.

The Design-Builder shall have on the project site, at all times when the Work is being performed, a competent English-speaking Superintendent or other authorized representative in responsible charge of the Work. Said individual shall be thoroughly qualified and fully authorized to execute the responsibilities of a Superintendent as described herein. The individual shall not be an owner, employee, or have any affiliation with any firm which is acting as a Subcontractor on the project. The Superintendent shall receive instructions from the Department, Quality Assurance Manager, or authorized representatives, be authorized to act for the Design-Builder as agent on the Work, and have full authority to execute orders or directions of the Department without delay.

The Design-Builder shall promptly supply, irrespective of the amount of work sublet, the necessary Materials, equipment, tools, labor, and incidental items to complete the Contract.

Should the Design-Builder, or any of its duly authorized representatives, fail to cooperate to the extent that the integrity of the Work is compromised, or the safe prosecution of the Work is jeopardized, the Department or Quality Assurance Manager may immediately suspend all Work. Any unsafe conditions will be corrected by the Design-Builder and the uncooperative person or persons shall be removed from the Project before the resumption of the Work. Failure to rectify the situation may result in the termination of the Contract in accordance with the provisions of 108.11.

105.06 Cooperation with Utilities. Utility items that are to be relocated or adjusted by the utility, others, or the Design-Builder will be identified by the Design-Builder.

All utility facilities and appurtenances within the construction limits will be shown on the Design-Builder developed Plans and relocated or adjusted at the utility owner's expense, unless otherwise specified. The locations of these utilities are as provided by the utility owners and may not be exact, particularly with regard to underground installations. Design-Builder work procedures are to account for the inaccuracy inherent in the representation of their location. Attention is directed to the possible existence of underground facilities not known to the Department.

New Hampshire State Law, RSA 374:48-56, requires that anyone who excavates in a public way or utility easement must notify the utility damage prevention system, DIG-SAFE, at least 72 hours prior to starting work.

The Design-Builder shall be responsible to notify the DIG-SAFE Call Center (Tel. No. 1-888-DIG SAFE (1-888-344-7233) at least 72 hours in advance of starting any excavation or erecting permanent construction signing. Saturdays, Sundays, and legal holidays are not to be included in the computation of the required 72-hour notice.

The Design-Builder shall keep written documentation with the date, time, numbers assigned, and the name of the person answering the call at the DIG-SAFE Center.

Notice of intent to excavate cannot be made more than 30 days prior to actual work. All utility facilities within the proposed Work, including advance construction sign locations, should be identified and marked prior to construction. Suspension of the Work for more than 30 days at any time will require re-notification of the DIG-SAFE Center to ensure validity of markings and to protect interim utility construction.

The Design-Builder shall layout in advance permanent construction signs and excavation areas prior to the start of the 72-hour period required by DIG-SAFE.

The Design-Builder shall additionally notify municipal and privately-owned utilities to identify, locate, and mark their facilities separately from those to be located through the DIG-SAFE system.

Once located and marked, the Design-Builder shall maintain all utility markings and provide access to any and all installations to permit repairs and maintenance of service as needed.

The Design-Builder shall cooperate with utility owners in the removal and rearrangement of underground or overhead utility facilities to minimize interruption to utility services and duplication of work by the utility owners.

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Facilities or appurtenances that are to remain in place during construction shall be accounted for and protected by the Design-Builder's work procedures. The fact that an underground facility is not shown on the plans shall not relieve the Design-Builder of its responsibility under this Section. At points where the Design-Builder's operations are adjacent to properties of railway, telecommunications, gas, and electric power companies, and other utilities, or are adjacent to other property where damage might result in considerable expense, loss, or inconvenience, Work shall not commence until all arrangements necessary for the protection thereof have been made.

The Design-Builder will notify the Department and all utility companies, pipe line owners, or other parties affected by the Work and have all necessary adjustments of the public or private utility fixtures and appurtenances within or adjacent to the construction limits made as soon as possible.

In the event utility services are interrupted as a result of damage within the Limits of Construction, the Design-Builder shall notify the appropriate utility authorities and cooperate with them until service has been restored. Work shall not commence around fire hydrants until provisions for continued service have been made and approved by the local fire authority.

Repairs to damaged utilities caused by carelessness or omissions on the part of the Design-Builder shall be corrected at the Design-Builder's expense. The damaged facilities shall be restored to a condition similar or equal to that existing before the damage occurred.

It is understood and agreed that the Design-Builder, at the time of submitting the Proposal has considered all of the permanent and temporary utility facilities in their present or relocated positions as evident on the site, and that no compensation will be allowed for any delays, inconvenience, or damage sustained due to any interference from such utility facilities or the operation of moving them. Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in protecting or repairing property as specified above shall be considered as included in the lump sum bid price.

Should the Design-Builder desire to have any rearrangement made of any utility facility, or other improvement, for the Design-Builder's convenience in order to facilitate construction operations, the Design-Builder shall make whatever arrangements are necessary with the owners of such utility or other non-highway facility for such rearrangement and bear all related expenses.

105.07 Cooperation Between Contractors. The Department reserves the right at any time to Contract for and perform other or additional work on or near the Work covered by the Contract.

When separate Contracts are let within the limits of any one project or on adjacent projects, each Contractor shall conduct the Work without interfering or hindering the progress or completion of the work by other Contractors. Contractors working on the same project or adjacent projects shall cooperate with each other in a manner to serve the best interest of the State. In case of any unavoidable interference, the Department will determine priorities.

The Design-Builder, and any adjacent Contractor, involved shall assume all liability, financial or otherwise, in connection with the Contract and shall protect and save harmless the Department from damages or claims that may arise because of inconvenience, delays, or loss experienced because of the presence and operations of other Contractors working within the limits of the same project.

The Design-Builder shall arrange the Work and place and dispose of materials being used without interfering with operations of the other Contractors within the limits of the same project or on adjacent projects. The Work shall be coordinated with the work and sequence of other Contractors.

105.08 Construction Stakes, Lines, and Grades. The Design-Builder will set stakes and furnish data necessary to establish the line and grade of the finished surface, the lines and grades of all waterways and structures, and such other points and bench marks as are necessary to lay out the Work correctly. This "initial" layout will include control points, bench marks, line ties, and leveled side stakes as required for grade control and reproduction of construction center line. It will also include bridge targets, line ties, and reference stakes for bridges, retaining walls, and full span overhead sign structures. The Quality Assurance Manager will check the proposed grades; any mistakes or errors identified shall be brought to the attention of the Department and Design-Builder, and adjustments shall be made by the Design-Builder.

The Design-Builder will stake and reference all required Rights-of-Way, easement limits, and bounds.

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The Design-Builder shall be responsible for the preservation of all “initial” layout stakes and marks. Damaged or destroyed points, bench marks, or stakes or any reference points damaged or made inaccessible by the progress of the construction shall be replaced. Replacement of all “initial” layout (with the exception of side stakes or drainage reference stakes) shall be performed by or under the direction of a Licensed Land Surveyor.

The Design-Builder shall perform all necessary layout work not specified above in order to construct all elements of the Project as shown on the RFC Plans and specified in the Contract. This work shall include, but shall not be limited to, stakeout necessary for re-establishment of line and grade as earthwork operations progress, stakeout, layout, and elevations as required for structures, forms, pile layouts, and paving. Prior to paving, the Design-Builder shall perform all work necessary to set the blue top stakes for fine grading.

The Design-Builder shall perform all required layout work with competent, qualified personnel to meet minimum Third-order, Class I survey accuracy and procedures (Horizontal: 1 in 10,000, Vertical: 0.05 ft (2.0 mm) $\times \sqrt{\text{distance in miles (kilometers)}}$). The Design-Builder is solely responsible for the accuracy of the Work. All computations necessary to establish the exact position of the Work from control points shall be made and preserved by the Design-Builder. All computations, notes, and other records necessary to accomplish the Work shall be neatly made. Such computations, notes, and other records shall be made available to the Department upon request.

The Department or Quality Assurance Manager may check all or any portion of the layout, stake-out, or notes made by the Design-Builder. Any necessary correction to the Work shall be made immediately by the Design-Builder. Such checking by the Department will not relieve the Design-Builder of any responsibilities for the accuracy or completeness of the work.

No entitlement to additional compensation will be considered because of alleged inaccuracies.

105.09 Authority and Duties of Representatives of the Department. As the direct representative of the Department, the Contract Administrator has the right to inspect all work, has the authority to reject nonconforming work and defective material, to suspend any work that is being improperly performed, and to withhold payment until defective or nonconforming work has been corrected. The Contract Administrator, in the sole discretion of the Contract Administrator, also has the authority to suspend work, or specific aspects of the work, if necessary to address a concern for safety of the workers or the travelling public, or a serious environmental concern or violation. Notwithstanding any other provision of law, case law, regulation, or the Contract, no additional compensation shall be provided for any work suspensions of this sort. The Contract Administrator’s rights assigned above are completely independent from similar rights of the Design-Builder; the Contract Administrator’s possession of these rights does not relieve the Design-Builder of their responsibility to exercise any rights/authority granted to both the Contract Administrator and any member of the Design-Builder.

Except as permitted and instructed by the Department, the representatives are not authorized to revoke, alter, enlarge, relax, or release any requirements of the Contract, nor to issue instructions contrary to the Contract. They are not authorized to act in a supervisory capacity for the Design-Builder or to interfere with the management of the Work by the Design-Builder. Any advice that the assistants or representatives of the Department may give the Design-Builder shall not be construed as binding the Department in any way, nor releasing the Design-Builder from the fulfillment of the terms of the Contract.

All transactions between the Design-Builder and the representatives of the Department that are subject to protest or where payments are involved shall be made in writing.

105.10 Inspection of Work. Materials and each part or detail of the Work shall be subject to inspection by the Department. The Department shall be allowed and provided safe access to all parts of the Work and shall be furnished with information and assistance by the Design-Builder as required to make a complete and detailed inspection.

The Department will not be required to pay for any work done or materials used without quality control and quality assurance performed in accordance with the Contract and Project specific QC/QA plans, as determined by the Department.

When any unit of government or political subdivision, utility, or any corporation is to accept or pay for a portion of the Contract cost or has an interest in the Work for other reasons, its representatives shall have the right to inspect the Work. The inspection by these agencies does not make them a party to the Contract nor will it change the rights of the Contract parties.

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105.11 Removal of Unacceptable and Unauthorized Work. Work that does not conform to the Contract requirements will be considered unacceptable, unless accepted under the provisions of 105.03.

Unacceptable Work, whether the result of poor workmanship, use of defective or unapproved materials, damage through carelessness, or any other cause found to exist before Acceptance of the Work, shall be removed and replaced at the Design-Builder's expense.

Work done contrary to that Released for Construction by the Design-Builder, or beyond the Limits of Construction except as specified without permission of the Department is considered unauthorized and will not be considered for payment. Corrective work meeting the Contract provisions shall be at the expense of the Design-Builder. If the Design-Builder fails to proceed promptly or provide written notice of intent to proceed, with the performance of corrective work ordered by the Department, after 48 hours notice, the Department has the authority under this Subsection to have the unacceptable work removed and remedied by others and to deduct the cost of the work by others from the money due the Design-Builder.

105.12 Construction Zone(s). Pursuant to the authority granted the Commissioner of Transportation under RSA 266:20, construction zones are established in accordance with the following:

A construction zone will be established for any highway or related part thereof designated for construction, reconstruction, or repair by the Department.

For the purpose of definition, the limits of the Construction Zone(s) will be the beginning and end of the designated Project, or portions thereof, including approaches and connections as denoted within the Contract. The Construction Zone will become effective at the time the construction signs are erected and will remain in force until the signs are removed.

Use of construction and maintenance equipment within limits of Construction Zone(s) will be as allowed in 105.13.

Extension of the Construction Zone outside the limits noted above may only be granted upon written request and issuance of a Construction Zone extension permit. The permit will expire upon removal of the construction signs, as noted above, or by letter from the Department, if conditions warrant an earlier suspension. (Extensions of the Construction Zone will not be permitted on the Interstate System due to the vehicle weight limitations of Federal law 23 USC 127.)

105.13 Load Restrictions.

A. **Outside Construction Zone Limits.** The Design-Builder's hauling and construction equipment shall not exceed the legal or posted gross loads for any bridge or highway being used outside a Construction Zone as referenced in 105.12.

B. Within Construction Zone Limits.

1. **On New or Existing Pavements.** Trucks or equipment hauling loads in excess of legal loads shall be certified per RSA 266:18-d to the weight limitations of RSA 266:18-b. Without written authorization from the Department, heavy "off-road" hauling equipment shall not be allowed on pavement that is (or will be subject to use as) a public highway. When such highways are in use by the Design-Builder and the public, authorization will be contingent upon an approved clear zone or approved physical barrier between construction equipment and the public.

2. **On New or Existing Bridges.** Gross loads in excess of the legal gross loads will not be allowed unless authorized in writing by the Department. Requests for such authorization shall be in writing and shall indicate the length of the vehicle, the type and amount of gross load with the location and the load distribution to each axle. Authorization will specify the maximum speed and location of loads relative to the centerline of the bridge.

New concrete bridge decks shall be closed to traffic, including the Design-Builder's trucks and equipment, for a period of time as specified in 520.3.11.2.1 with the following exception:

Lightweight vehicular loads weighing less than 6,000 lb (2720 kg) GVW will be allowed after the concrete test cylinders have attained 80 percent of the minimum compressive strength of the specified

deck concrete. Heavier loads may be permitted upon written request and authorization in the same manner as for gross loads in excess of the legal gross loads.

C. **General.** The Design-Builder shall not operate equipment of such type, weight, or so loaded as to cause any damage to structures, to the roadway, or to any other work. Hauling of materials over the pavement base course or surface course under construction shall be subject to approval by the Department. The Design-Builder shall be responsible for all damage done by the Design-Builder's equipment. No permit or approval will relieve the Design-Builder of liability for damages.

It is specifically called to the Design-Builder's attention that highways not on the State system are the property of the municipality within which they are located. Such highways are maintained and regulated by the municipal authority. Prior to subjecting such highways to construction loads and equipment, the Design-Builder shall secure the written consent of the proper municipal authority. During the use of these highways, the Design-Builder shall maintain them in a condition satisfactory to the authorities and safe for the traveling public. Damage attributed to hauling operations shall be repaired by the Design-Builder to the satisfaction of the proper authorities.

D. **Vehicle Weight.** The Design-Builder shall monitor highway vehicles for compliance with the vehicle's registered weight. The Design-Builder will be responsible for any damage caused by overweight vehicles.

105.14 Maintenance of Work During Construction. The Design-Builder shall maintain the Project work site in a satisfactory condition until the project is accepted. This maintenance shall consist of continuous and effective work prosecuted day-by-day.

The Design-Builder shall take every reasonable precaution against spillage of construction materials on existing highways and bridges. The Design-Builder's attention is called to "Spillage of Material" under 107.01. If spillage does occur, the Design-Builder shall remove such spillage immediately after its occurrence. Particular care shall be taken to see that bridge deck and approach surfaces are kept as smooth as possible and free from all stone, gravel, or any other material that would increase impact or would damage the finished bridge or approach surfaces.

Maintenance shall include, but not be limited to, mowing grass, and cleaning and maintenance of erosion control and drainage structures.

The Department will notify the Design-Builder of failure to meet these provisions. If unsatisfactory maintenance is not remedied within 24 hours after receipt of the notice, the Department will proceed to maintain the Project. The Design-Builder shall pay the entire cost of this maintenance.

Once the work involves the placement of material on, or the use of a previously constructed subgrade, base course, pavement, or structure, the Design-Builder shall maintain the previously constructed work.

All cost of maintenance work during construction and before Acceptance shall be included in the lump sum bid price.

105.15 Opening Sections of Project to Traffic. The Department may order certain sections of the Project to be opened to traffic before Completion or Acceptance. Opening these sections shall not constitute acceptance of the Work or a waiver of any Contract provisions.

If the Design-Builder is late in completing features of the Work according to the Contract or Progress Schedule, the Department will give written notification establishing a time period for completing these features. If the Design-Builder fails to complete the Work ordered, or make a reasonable effort to complete the Work according to the written notification, the Department may order all or a portion of the Project opened to traffic. The Design-Builder shall not be relieved of liability or responsibility for maintaining the Work and shall conduct the remaining construction operations with minimum interference to traffic and without compensation for the added cost of the work.

105.16 Furnishing Right-of-Way. The Design-Builder's attention is called to 104.15.15 for additional Right-of-Way requirements.

Material production facilities may be permitted on state-owned property for the production of Materials needed for particular Department projects. Under no circumstances shall state-owned property be used by the Design-Builder for any business enterprise unless a request is received by the Commissioner and processed in accordance with RSA 4:40, as amended.

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105.17 Project Acceptance. Acceptance will not occur until Project Completion as defined in Section 101. However, at the request of the Design-Builder and at the discretion of the Department, the Contract Time may be stopped without all the required documents, certificates, or proofs of compliance. It must be established that the Design-Builder could not reasonably or in good faith provide some of the required compliance documentation before incorporating in the Work the Material requiring compliance documentation.

When the Contract Time is stopped, the Design-Builder is to expeditiously provide the exempted documents, certificates, or proofs of compliance. Acceptance and payment will not be made until all documents, certificates, or proofs of compliance have been executed and delivered to the Department.

- A. **Partial Project Acceptance.** When a portion of the Project, such as a structure, interchange, or section of road or pavement is substantially completed, the Design-Builder may request final inspection of that portion. If the portion has been completed in accordance with the Contract except: (1) the removal of temporary by-passes or other temporary structures that have been erected for the convenience of the traveling public and that do not interfere with the normal use of the roadway, (2) the satisfactory cover and mature growth of grass in seeded areas, or (3) the clean-up of pits, the Department may accept the portion as completed and relieve the Design-Builder from the cost of future maintenance of the designated portion of the Project. Work subsequently required by the Department on the accepted portion shall be paid as provided for in 109.04. The decision to make partial acceptance of a portion of the Project is solely at the discretion of the Department. Partial acceptance does not void or alter any of the terms of the Contract.
- B. **Project Acceptance.** Upon receiving notice from the Design-Builder of Project Completion, the Department will make an inspection. If the Work required by the Contract is found to be complete, the inspection shall constitute the final inspection and the Department will notify the Design-Builder in writing to acknowledge completion of the work.

If unsatisfactory Work is noted, the Department will give the Design-Builder the necessary instructions for correction of such Work, and the Design-Builder shall immediately comply with and execute such instructions. Upon correction of the Work, another inspection will be made that shall constitute the final inspection. If the Work has been satisfactorily completed, the Department will provide Acceptance of the Work by notifying the Design-Builder in writing of the date of final inspection and Acceptance.

105.18 Claims. The Design-Builder is not entitled to file a claim in accordance with this subsection 105.18 unless the Design-Builder has first provided timely and complete notice and fulfilled the requirements of 104.02.G. Within 20 workdays of the date of the Department's final written response or the date that 104.02.G.4 specifies that such a response should have been received, if the Design-Builder disagrees with the Department's final written response or the response is untimely, the Design-Builder shall provide written notice to the Department of its intent to file a claim seeking compensation or a time extension for that portion of the Department's response with which the Design-Builder disagrees. Failure of the Design-Builder to provide timely notice of its intent to file a claim will constitute a waiver of the Design-Builder's entitlement to compensation or a time extension for any claim for which notice was not provided. Failure of the Design-Builder to continue to maintain records as required by 104.02.G.2 will also constitute a waiver of the Design-Builder's entitlement to compensation or a time extension for those aspects of the Department's final written response with which the Design-Builder disagrees.

If the Design-Builder does not provide the Department with documentation as described in 104.02 and 109.04, the Design-Builder waives entitlement to compensation and/or time adjustment under 109.04 and 108.07. Notice by the Design-Builder, and the fact that the Department has kept account of the costs shall not be construed as substantiating the validity of the claim. Compensation shall be determined in accordance with 109.04 and time extensions shall be determined in accordance with 108.07 will be made to the Contract if the claim is found by the Department to have merit. Failure to submit a claim prior to final payment on the Contract shall constitute a waiver of entitlement to compensation and/or time adjustment.

A. Claim Submittals. Claim submittals shall be in sufficient detail to enable the Department to determine the basis for entitlement and the compensation and time extension due, if any. At a minimum, the Design-Builder's claim shall include the following pertinent data arranged in a logical sequence:

1. Detailed factual statement of the claim providing all dates, locations, and work affected by the claim.
2. The date or dates conditions resulting in the claim became evident and events resulting in the claim occurred.
3. The name, title, and work assignment of each Department employee knowledgeable of the facts that gave rise to such claim.
4. The name, title, and work assignment of each Design-Builder employee knowledgeable of the facts that gave rise to such claim.
5. The specific provisions of the Contract that support the claim, and a statement as to why the provisions support the claim.
6. Schedules and updates prepared in accordance with 108.03, Schedule, if delays or a request for a time extension are relevant to the disputed issue;
7. The identification of any relevant documents, and the substance of any significant oral communications relating to the claim.
8. A statement as to whether the compensation or extension of time being claimed is based on the provisions of the Contract or an alleged breach of Contract.
9. If extension of time is also sought, the specific days for which it is sought, and the basis for such claim as determined by an analysis of the construction schedules.
10. The amount of compensation sought with supporting documentation of the amount in accordance with 109.04 of that amount.

The Design-Builder's failure to provide this information will constitute a waiver of the Design-Builder's entitlement to compensation or a time extension for the claim.

B. Required Certification Of Claims. In addition to the information required in 105.18.A, the Design-Builder's Claim must be accompanied by the following signed certification. The Design-Builder's failure to provide this certification will constitute a waiver of the Design-Builder's entitlement to compensation or a time extension for the claim:

CERTIFICATE OF CLAIM

The undersigned is duly authorized to certify the enclosed documentation on behalf of (the Design-Builder).

(The Design-Builder) certifies that the documentation is submitted in good faith, that the information provided is accurate and complete to the best of (the Design-Builder's) knowledge and belief, and that the compensation and time extension requested accurately reflects the Contract Revision for which (the Design-Builder) believes the department is responsible.

Name and Title

Company

Date

Signature

Notarized:

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C. Review of Claims. The Department will provide written acknowledgment of receipt of the claim within 10 days to the Design-Builder. During the claim review process by the Department, the Design-Builder shall provide the Department access to and, if requested, copies of the following documents. The Design-Builder's failure to provide this access or copies as requested will constitute a waiver of the Design-Builder's entitlement to compensation or a time extension for the claim:

1. Daily time sheets and foreman's daily reports.
2. Union agreements, if any.
3. Insurance, welfare, and benefits records.
4. Payroll register.
5. Earnings records.
6. Payroll tax returns.
7. Material invoices, purchase orders, and material and supply acquisition Contracts.
8. Material cost distribution worksheets.
9. Equipment records (list of company equipment, rates, etc.)
10. Vendor rental agreements.
11. Subcontractor payment certificates and invoices.
12. Canceled checks (payroll and vendors).
13. Job cost report.
14. Job payroll ledger.
15. General ledger, general journal, (if used) and all subsidiary ledgers and journals together with all supporting documentation pertinent to entries made in these ledgers and journals.
16. Cash disbursement journal.
17. Financial statement for all years reflecting the operations on this Project.
18. Income tax returns whether such records are maintained by the company involved, its accountant, or others.
19. All documents that reflect the Design-Builder's actual profit and overhead during the time the Project was being performed and for each of the five years prior to the commencement of this Project.
20. All documents related to the preparation of the Design-Builder's bid, including the final calculations on which the bid was based.
21. Worksheets used to prepare the claim, establishing the cost components for items of the claim including, but not limited to, labor, benefits and insurance, materials, equipment, Subcontractors, and all documents that establish the time periods, individuals involved, the hours and the rates for the individuals.

105.19 Resolution of Claims and Disputes.

- A. After review of the claim, if the Department concludes that the Design-Builder has established entitlement to compensation or a time extension, the Department will determine compensation in accordance with 109.04, and time extensions in accordance with 108.07.
- B. Within 30 calendar days of the Department's decision, if the Design-Builder does not agree with the Department's decision, the Design-Builder may appeal the matter to the Commissioner in accordance with the Department's statutory appeals procedures. The statutory appeals procedures are available from the Office of Hearings and Rules at the Department. Nothing in this subsection shall be construed as establishing any claim contrary to the terms of 104.02. Compensation shall be in accordance with 109.04 and time extensions as provided in 108.07 will be made to the Contract if the claim is found by the Commissioner to have merit.

SECTION 106 -- CONTROL OF MATERIAL/QUALITY

106.01 Source of Supply and Quality Requirements. All materials used shall meet the requirements of the Contract. In order to expedite the inspection and testing of materials, the Design-Builder shall notify the Department of the proposed sources of materials to be used in the Work before delivery. The Department has the option of conditionally approving materials at the supply source. Any material incorporated into the Work that subsequently fails to meet the Contract requirements shall be corrected to the satisfaction of the Department or removed. All materials used in the Work shall be new unless otherwise specifically prescribed in the Contract.

106.02 Local Material Sources. Possible sources of local materials may be described in the RFP. Since it is not feasible to determine from natural deposit sampling the acceptable limits for an entire deposit, variations in materials quality within the deposits are to be considered usual and to be expected. The Department may order procurement of material from any portion of a deposit and will reject portions of the deposit as unacceptable if the material fails to meet specification requirements.

The Department may make available the right to take materials from designated sources described in the Contract together with the right to use the property as specified, for plant site, stockpiles, and hauling roads. If this procedure has been chosen by the Department, the Contract will define the acquisitions or rights provided.

If material is used from other than Contract designated sources, the Design-Builder shall comply with the regulations of RSA 155-E, acquire the necessary rights to take materials from the sources, and pay all related costs. The Design-Builder shall submit to the Department a copy of the permit for excavation (required under RSA 155-E) showing that the excavation site has been permitted by the Regulator prior to removing any material from that site.

Where practicable, pits, quarry sites, and access roads shall be located so that they will not be visible from any highway. Pits and quarries shall be excavated so that water does not collect and stand on the site during the work. Following the completion of the work, pits and quarries shall be left in a neat and presentable condition.

For Design-Builder-acquired rights to excavation sites, upon completion of the work, the Design-Builder shall ensure that the necessary grading and reclamation work as required per RSA 155-E is done. Acceptance of the project will not be made until a written release from the property owner indicates that the agreement conditions with the Design-Builder have been satisfied.

The Design-Builder's attention is directed to RSA 482-A:3, the requirements of which must be fulfilled if the excavation site involves excavation or dredging of wetlands and to the provisions of RSA 483-B and RSA 485-A:17, if the excavation site involves dredging or mining on the border of the surface waters of the State or will significantly alter the characteristic natural runoff or create an unnatural runoff.

The Design-Builder's attention is also directed to Executive Orders 11988 and 11990 if the excavation site will affect floodplains or wetlands.

The Design-Builder's attention is also directed to Section 10 of the Rivers and Harbors Act of 1899 and Sections 401 and 404 of the Clean Water Act, for which compliance may require a permit for work in or affecting "navigable waters of the U.S.," or material placed in "waters of the U.S.," including wetlands.

The Design-Builder is cautioned of the potential to encounter contaminated soils within the excavation area and, if encountered, shall avoid incorporating contaminated soils within the limits of the project. Furthermore, the Design-Builder shall complete a Historic and Archaeological Resources certification in accordance with the Contract.

A Pit Agreement Form shall be completed and submitted for each excavation site that the Design-Builder intends to open in accordance with RSA 155-E:2,IV. The Pit Agreement form may be obtained online at www.nh.gov/dot/business/contractors.htm or from the Department.

106.03 Samples, Tests, Cited Specifications. Department personnel may take samples for Independent Verification Testing. Unless otherwise designated, the Department's testing costs will be at the expense of the Department. Materials being used are subject to inspection, testing, or rejection at any time. The Department will furnish copies of test reports to the Design-Builder upon request.

The Design-Builder is responsible for the quality of construction and materials incorporated into the Work. The Design-Builder shall perform all necessary QC inspection, sampling, and testing in accordance with the

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approved CQMP. The Design-Builder shall not rely on the results of the Department's Independent Verification Testing for process QC.

Unless otherwise designated, materials Acceptance tests will be performed by and at the expense of the Department using the standard test methods of the Department, AASHTO, ASTM, or FSS (unless other standard methods are designated) that are in effect on the date of receipt of Proposals, except that the Department reserves the right to make use of any information or method of testing to determine that the material meets the Contract requirements. If there is a difference in the test methods, the order of precedence for the test procedures used will be as follows:

1. The Department's Standard Materials Test Methods
2. AASHTO
3. ASTM
4. FSS

Samples for testing purposes shall be furnished by the Design-Builder at no cost to the Department. The sampling and sample splitting of materials tested by the Department will be performed or observed by a qualified representative of the Department.

The Department may retest and reject unacceptable materials previously tested and conditionally accepted at the source of supply. Materials to be used are subject to inspection, testing, or rejection prior to Acceptance. Copies of any tests will be furnished to the Design-Builder's representative upon request.

Random samples of materials or completed work may be taken as checks on the control sampling and testing to determine reasonable compliance with the Specifications. Such sampling will be at any time prior to Acceptance of the Work, either while any phase of the Work is in progress or after it has been completed. The extent and locations of such random sampling will be as designated by the Department.

In all AASHTO or ASTM specifications, the sections entitled "Inspection" shall be amended to provide that tests of materials may be made in any Laboratory as defined in 101.

All sieves shall conform to the requirements of the AASHTO M 92, and shall be square hole wire cloth sieves.

When sampling and testing of seeds is required, sampling and testing methods shall be as prescribed in the Rules and Regulations established in accordance with RSA 433.

Equipment required to be supplied by the Design-Builder for Department use under the specifications shall be calibrated yearly or as directed, in accordance with the calibration method indicated below. Newly acquired equipment without manufacturer's certification and equipment that has not been calibrated or verified because it has been removed from service shall be calibrated or verified before being placed in service.

Equipment	Calibration Method
Bench Oven	NHDOT Procedure SC-2
Centrifuge Extractor	AASHTO T 164
Marshall Hammer	AASHTO T 245
Marshall Molds	AASHTO T 245
Mechanical shaker	AASHTO T 27, 7.4
Pressure Air Meter	AASHTO T 152
Proctor Molds	NHDOT Procedure SC-3
Proctor Manual Hammers	NHDOT Procedure SC-4
Scales and Balances	AASHTO M 231
Sieves	ASTM E-11 Methods 1&2
Slump Cone	NHDOT Procedure PC-5
Straight edge	NHDOT Procedure SC-6
Standard 1/10 ft ³ (0.003 m ³) Container (Unit Weight Buckets)	NHDOT Procedure PC-2
Vacuum Pump	AASHTO T 209

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Any identifying the equipment, records of calibration, or verification work performed in chronological order and the next date calibration or verification work is required (Month and Year) equipment listed above required by sections 401, 520, and 698 shall be calibrated by the Design-Builder in accordance with the calibration method specified.

The Design-Builder shall prepare and maintain record forms and a file for each piece of equipment in each laboratory requiring calibration or verification. The file and form for each piece of equipment shall contain detailed information and shall be kept in the same laboratory as the equipment.

When any test equipment is overloaded, mishandled, giving results that are suspect, or is not meeting specification tolerances, the Department shall notify the Design-Builder and the equipment shall be taken out of service. The equipment shall be returned to service only after appropriate repairs are made and calibration and verification shows the equipment to function satisfactorily or to meet specification tolerances.

106.03.1 Quality Control/ Quality Assurance (QC/QA). The Design-Builder may observe the Department's sampling and testing. If the Design-Builder believes that a sampling and/or test procedure deviates from the specified procedure, the Design-Builder shall describe the deviation to the Department's designated representative immediately and document the deviation in writing within twenty-four (24) hours. Immediately upon request and explanation of the deviation by the Design-Builder, the original sampling and/or testing will be completed and recorded, and then a second sample of the material will be taken and tested using what the Design-Builder believes to be the correct procedure. The specified sample and/or test method will be reviewed at a later time to determine which procedure is correct. The test result obtained using the procedure determined to be correct will be used for the subplot.

The Design-Builder may dispute the results of acceptance tests performed in a laboratory. If the Design-Builder believes that a laboratory test result is in error, the Design-Builder shall substantiate the reason for the belief that the test result is in error immediately and document the reasons in writing within 24 hours of this notification. If the Department agrees that there is sufficient reason to question the test result, the Department shall arrange to have the material tested by a different technician in a different Department laboratory or by an independent laboratory accredited by AASHTO in the test to be performed. If additional samples are necessary, the Design-Builder shall assist in obtaining the samples at no cost to the Department. If samples are to be taken from the finished work, the Design-Builder shall replace the removed material to the satisfaction of the Department, also at no cost to the Department.

If the original sampling and/or testing procedure or laboratory test result is found to have been done correctly, the Design-Builder shall bear the cost of the second sampling, testing, and evaluation, as shown in the table below. Such costs shall be deducted from any monies owed the Design-Builder.

TEST	COST
Concrete Air Test	\$200/test
Concrete Strength Test	\$200/test
Concrete W/C Ratio Test	\$200/test
Concrete Permeability Test	\$500/test
Concrete Cover Test	\$500/test
Asphalt Gradation and/or Voids Tests	\$200/test
Asphalt Voids and/or Thickness Tests	\$300/test
Asphalt Cross-Slope Measurement	\$200/test
Asphalt Ride Quality Test	\$1100/test

Items designated for acceptance under Quality Assurance (QA) provisions will be randomly sampled and tested in accordance with the recommended acceptance guidelines specified for that item. Acceptance tests will govern in all cases for determination of pay factors without regard to quality control tests.

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106.03.1.1 The Design-Builder shall provide a Process Quality Control Plan, as part of the CQMP, adequate to produce work of acceptable quality. The Design-Builder shall perform process quality control sampling, testing, and inspection in accordance with approved CQMP.

The Department will not sample or test for Process Control or assist in controlling the Design-Builder's production operations. The Design-Builder shall provide personnel and testing equipment capable of providing a product that conforms to specified requirements. Continued production of non-conforming work at a reduced price, in lieu of adjustments to bring work into conformance, will not be allowed.

106.03.1.2 The Design-Builder shall provide and maintain a Process Quality Control Plan, hereinafter referred to as the "Plan," including all the personnel, equipment, supplies, and facilities necessary to obtain samples, perform tests, and otherwise control the quality of the product to meet specified requirements.

The Design-Builder shall be prepared to present and discuss, at the pre-construction conference, quality control responsibilities for the specific items indicated in the Contract. The Design-Builder shall submit five copies of the Process Quality Control Plan to the Department Representative a minimum of 20 working days prior to the pre-placement meeting. A copy of the cover letter or transmittal letter shall be forwarded to the Contract Administrator to notify project personnel of the Plan submittal.

The Design-Builder shall not start work on the subject items without an approved Plan. Partial payment will not be made for materials subject to specific quality control requirements without an approved Plan. The approval process for the Design-Builder's Plan may include inspection of testing equipment and a sampling and testing demonstration by the Design-Builder's technician(s) to assure an acceptable level of performance.

106.03.1.3 The Design-Builder shall schedule a pre-placement meeting a minimum of five working days prior to the start of related construction. The meeting shall include the Plan Administrator, Contract Administrator, District Construction Department, Design-Builder, Supplier, and QC/QA Coordinator. Additional meetings may be required if changes to the plan or procedures are made, or when required to solve problems that arise.

106.03.1.4 All Design-Builder process quality control testing under the Plan shall be performed by qualified technicians in laboratories approved by the Bureau of Materials and Research. Technician qualifications shall be as described in the specifications for the item being accepted under Quality Assurance provisions.

Laboratory facilities shall be kept clean and all equipment shall be maintained in proper working condition. The Department shall be permitted unrestricted access to inspect and review the Design-Builder's laboratory facility. The Department will advise the Design-Builder in writing of any noted deficiencies concerning the laboratory facility, equipment, supplies, or testing personnel and procedures. Deficiencies may be grounds for the Department to order an immediate stop to incorporating materials into the work until deficiencies are corrected.

106.03.1.5 The Plan shall be administered by a qualified individual. Administrator qualifications shall be described in the specifications for the item being accepted under Quality Assurance provisions. The Plan Administrator or his/her approved designee shall be available whenever work under QC/QA specification is being performed.

The individual administering the Plan must be a full-time employee of or a consultant engaged by the Design-Builder. The individual shall have full authority to institute any and all actions necessary for the successful operation of the Plan.

106.03.1.6 The Plan shall contain a system for sampling that assures all material being produced has an equal chance of being selected for testing. The Department shall be provided the opportunity to witness all sampling.

When directed by the Department, the Design-Builder shall sample and test any material that appears inconsistent with similar material being sampled, unless such material is voluntarily removed and replaced or corrected by the Design-Builder. All sampling shall be in accordance with Department, AASHTO, or ASTM procedures.

106.03.1.7 All testing shall be performed in accordance with the acceptance test procedures applicable to the specified Contract items or other methods set forth in the approved Plan. Should acceptance test procedures not

be applicable to quality control tests, the Plan shall stipulate the test procedures to be utilized. Upon request, the Design-Builder shall provide copies of all test results on forms meeting the approval of the Department.

106.03.1.8 The Design-Builder shall maintain complete records of all process quality control tests and inspections. The records shall be available to the Department for review and copies furnished upon request.

Control Charts acceptable to the Department shall be maintained and kept current at a location satisfactory to the Department. As a minimum, the Control Charts shall identify the project number, the Contract item number, the test number, each test parameter, the upper and lower specification limit applicable to each test parameter, and the Design-Builder's test results. The Design-Builder shall use the Control Charts as part of a process control system for identifying production and equipment problems and for identifying pay factor reductions before they occur.

106.03.2 Items specified to be sampled and tested on a Quality Assurance (QA) basis which are subject to pay incentives will be evaluated for acceptance in accordance with the guidelines specified for that item. All acceptance test results for a lot as defined in the specification will be analyzed collectively and statistically by the Quality Level Analysis-Standard Deviation Method using the procedures listed to determine the total estimated percent of the lot that is within specification limits. Test results on material not incorporated in the work will not be included in the quality level analysis.

106.03.2.1 A lot containing non-specification material (less than 1.00 pay factor) will be accepted provided the pay factor is at least 0.75 and there are no isolated defects identified by the Department.

106.03.2.2 A lot containing non-specification material that fails to obtain at least a 0.75 pay factor will be subject to the following:

The Design-Builder shall submit a procedure for correction of the non-specification material for approval by the Department. After any approved correction of any sublots, new samples from these sublots will be taken to be used in calculating pay factors for the lot and the old test results will be discarded. Alternatively, the Design-Builder may submit a written request for acceptance of the material at a negotiated price. Such request for acceptance shall include an Engineering analysis showing expected effects on performance and service life. The Department will determine whether the material may remain in place at the negotiated price.

106.03.2.3 The Department may reject material that appears to be defective based on visual inspection. Such rejected material shall not be used in the work.

No payment will be made for the materials rejected by the Department unless the Design-Builder requests the rejected material be tested prior to disposal, and it is found to be acceptable. Three representative samples will be obtained and tested; and the results will be statistically evaluated. If found to remain in non-conformance, no payment will be made and the Design-Builder will bear the cost of the sampling, testing, and evaluation. If the pay factor is 0.75 or greater, or as otherwise specified, payment will be made for the materials at the invoice cost plus 10%.

106.03.2.4 Quality Level Analysis - Standard Deviation Method procedures are as follows:

1. Determine the arithmetic mean (X) of the test results:

$$X = \frac{\sum x}{n}$$

Where: Σ = summation of

x = individual test value of x

n = total number of test values

2. Compute the sample standard deviation(s):

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$$s = \sqrt{\frac{n\sum(x^2) - (\sum x)^2}{n(n-1)}}$$

Where: $\sum(x^2)$ = summation of the square of individual test values.
 $(\sum x)^2$ = summation of the individual test values squared.

3. Compute the upper quality index (Q_U):

$$Q_U = \frac{USL - X}{s}$$

Where: USL = upper specification limit.

4. Compute the lower quality index (Q_L):

$$Q_L = \frac{X - LSL}{s}$$

Where: LSL = lower specification limit.

5. Determine P_U (percent within the upper specification limit which corresponds to a given Q_U) from Table 106-1.

Note: If a USL is not specified, P_U will be 100.

6. Determine P_L (percent within the lower specification limit which corresponds to a given Q_L) from Table 106-1.

Note: If a LSL is not specified, P_L will be 100.

7. Determine the Quality Level (total percent within specification limits).

$$\text{Quality Level} = (P_U + P_L) - 100$$

8. Determine the Pay Factor (PF) for the lot from Table 106-2 using the Quality Level from step 7.

9. Determine the Composite Pay Factor (CPF) for each lot.

$$\text{CPF} = \frac{[f_1(PF_1) + f_2(PF_2) + \dots + f_j(PF_j)]}{\sum f}$$

Where: f_j = price adjustment factor listed in the specifications for the applicable property.

PF_j = Pay Factor for the applicable property.

$\sum f$ = Sum of the “F” (price adjustment) factors.

Note: Numbers used in the above calculations will be rounded to 3 places after the decimal point. Pay factors and Composite Pay Factors will be computed to 2 places after the decimal point.

106.03.2.5 If a measured characteristic is not included in the Contract or is not evaluated due to Department-owned test equipment being inoperable, its pay factor shall be 1.00 when calculating the CPF.

106.03.3 Random Sampling Locations. The selection of the sampling locations for quality acceptance tests must be entirely random. This procedure shall be used for determining the location for taking a sample in order to eliminate any intentional or minimize any unintentional bias on the part of the person taking the sample.

Sampling locations shall be determined on the basis of time, tonnage, volume, distance, area, and the size of the subplot to be sampled. Random numbers shall be selected using the procedures outlined below. Once the random numbers have been selected, they shall be applied to the subplot sizes to determine sampling location.

106.03.3.1 Sampling In-Place Roadway Material: Determine tonnage of the acceptance subplot. Following method #1 or method #2, pick two random numbers for each subplot. Multiply the random numbers by the width and tonnage to arrive at the sampling location.

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Example: A subplot is 750 tons (700 metric tons). The lane being paved is 12 ft. (3.0 m) wide. Using method #1 or method #2, choose a random number, which is then multiplied by 750 (700). In this instance, the number chosen was 0.376. Thus, the sample will be taken at 282 tons (263.2 metric tons) from the beginning of the subplot. Determine the location from the edge of the pavement by using the second random number, which is then multiplied by 12 ft (3.0 m). In this instance, the number chosen was 0.512. Therefore, the sample should be taken at 282 tons (263.2 metric tons) from the beginning of the subplot and 6 ft. (1.54 m) from the designated (right or left) edge of the pavement.

106.03.3.2 Sampling Concrete Truck Loads: Determine the quantity that represents a subplot of material. To determine which trucks to sample, choose a random number and multiply this number by the total quantity in the subplot. This will give an indication on when to take the sample.

Example: A subplot of concrete is 50 cy (38 m³). Using method #1 or method #2, choose a random number, which is then multiplied by 50 cy (38 m³). In this instance, the number chosen is 0.763. The result comes out at 38 cy (30 m³), which falls in the 5th load (assuming 8 cy (6 m³) per load). Sample the concrete within the middle third of the 5th load.

106.03.3.3 Instructions for choosing random numbers.

106.3.3.3.1 Method #1. Table 106-3 consists of all numbers from 0.001 to 1.000. Each number appears only once. To use the table correctly and to eliminate bias, point without looking to a number in the table. It may be advantageous to use a pointer such as a mechanical pencil or a like pointed object. Either page may be used but should be alternated between successive uses.

After picking a number, the basis is established for locating the sought-after number in a more random, unbiased method. Examine the first two digits of the three-digit number chosen. This number locates the line number (the vertical column on the left) to be used in finding the sought-after number. Note: the number 1.000 is invalid for choosing the line number.

Once the line number is chosen, repeat the procedure by choosing another number and, using the first digit, pick the column number (the horizontal numbers at the top of the table). The intersection of the two numbers is the sought-after number.

Table 106-3 – Table of Random Numbers may be obtained on line at www.nh.gov/dot/business/contractors.htm or from the Department.

106.03.3.3.2 Method #2. Random numbers may be obtained by using the random number generator function found on hand-held calculators or computer spreadsheet programs.

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Table 106-1 Quality Level Analysis by the Standard Deviation Method

P _U or P _L %*	Upper Quality Index Q _U or Lower Quality Index Q _L														
	n=3	n=4	n=5	n=6	n=7	n=8	n=9	n=10 To n=	n=12 to n=	n=15 to n=	n=19 to n=	n=26 to n=	n=38 to n=	n=70 to n=	n=201 to n=x
								11	14	18	25	37	69	200	
100	1.16	1.50	1.79	2.03	2.23	2.39	2.53	2.65	2.83	3.03	3.20	3.38	3.54	3.70	3.83
99		1.47	1.67	1.80	1.89	1.95	2.00	2.04	2.09	2.14	2.18	2.22	2.26	2.29	2.31
98	1.15	1.44	1.60	1.70	1.76	1.81	1.84	1.86	1.91	1.93	1.96	1.99	2.01	2.03	2.05
97		1.41	1.54	1.62	1.67	1.70	1.72	1.74	1.77	1.79	1.81	1.83	1.85	1.86	1.87
96	1.14	1.38	1.49	1.55	1.59	1.61	1.63	1.65	1.67	1.68	1.70	1.71	1.73	1.74	1.75
95		1.35	1.44	1.49	1.52	1.54	1.55	1.56	1.58	1.59	1.61	1.62	1.63	1.63	1.64
94	1.13	1.32	1.39	1.43	1.46	1.47	1.48	1.49	1.50	1.51	1.52	1.53	1.54	1.55	1.55
93		1.29	1.35	1.38	1.40	1.41	1.42	1.43	1.44	1.44	1.45	1.46	1.46	1.47	1.47
92	1.12	1.26	1.31	1.33	1.35	1.36	1.36	1.37	1.37	1.38	1.39	1.39	1.40	1.40	1.40
91	1.11	1.23	1.27	1.29	1.30	1.30	1.31	1.31	1.32	1.32	1.33	1.33	1.33	1.34	1.34
90	1.10	1.20	1.23	1.24	1.25	1.25	1.26	1.26	1.26	1.27	1.27	1.27	1.28	1.28	1.28
89	1.09	1.17	1.19	1.20	1.20	1.21	1.21	1.21	1.21	1.22	1.22	1.22	1.22	1.22	1.23
88	1.07	1.14	1.15	1.16	1.16	1.16	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17
87	1.06	1.11	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.13	1.13
86	1.04	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
85	1.03	1.05	1.05	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
84	1.01	1.02	1.01	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99
83	1.00	0.99	0.98	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.95	0.95	0.95
82	0.97	0.96	0.95	0.94	0.93	0.93	0.93	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
81	0.96	0.93	0.91	0.90	0.90	0.89	0.89	0.89	0.89	0.88	0.88	0.88	0.88	0.88	0.88
80	0.93	0.90	0.88	0.87	0.86	0.86	0.86	0.85	0.85	0.85	0.85	0.84	0.84	0.84	0.84
79	0.91	0.87	0.85	0.84	0.83	0.82	0.82	0.82	0.82	0.81	0.81	0.81	0.81	0.81	0.81
78	0.89	0.84	0.82	0.80	0.80	0.79	0.79	0.79	0.78	0.78	0.78	0.78	0.77	0.77	0.77
77	0.87	0.81	0.78	0.77	0.76	0.76	0.76	0.75	0.75	0.75	0.75	0.74	0.74	0.74	0.74
76	0.84	0.78	0.75	0.74	0.73	0.73	0.72	0.72	0.72	0.71	0.71	0.71	0.71	0.71	0.71
75	0.82	0.75	0.72	0.71	0.70	0.70	0.69	0.69	0.69	0.68	0.68	0.68	0.68	0.68	0.67
74	0.79	0.72	0.69	0.68	0.67	0.66	0.66	0.66	0.66	0.65	0.65	0.65	0.65	0.64	0.64
73	0.76	0.69	0.66	0.65	0.64	0.63	0.63	0.63	0.62	0.62	0.62	0.62	0.62	0.61	0.61
72	0.74	0.66	0.63	0.62	0.61	0.60	0.60	0.60	0.59	0.59	0.59	0.59	0.59	0.58	0.58
71	0.71	0.63	0.60	0.59	0.58	0.57	0.57	0.57	0.57	0.56	0.56	0.56	0.56	0.55	0.55
70	0.68	0.60	0.57	0.56	0.55	0.55	0.54	0.54	0.54	0.53	0.53	0.53	0.53	0.53	0.52
69	0.65	0.57	0.54	0.53	0.52	0.52	0.51	0.51	0.51	0.50	0.50	0.50	0.50	0.50	0.50
68	0.62	0.54	0.51	0.50	0.49	0.49	0.48	0.48	0.48	0.48	0.47	0.47	0.47	0.47	0.47
67	0.59	0.51	0.47	0.47	0.46	0.46	0.46	0.45	0.45	0.45	0.45	0.44	0.44	0.44	0.44
66	0.56	0.48	0.45	0.44	0.44	0.43	0.43	0.43	0.42	0.42	0.42	0.42	0.42	0.41	0.41
65	0.52	0.45	0.43	0.41	0.41	0.40	0.40	0.40	0.40	0.39	0.39	0.39	0.39	0.39	0.39
64	0.49	0.42	0.40	0.39	0.38	0.38	0.37	0.37	0.37	0.37	0.36	0.36	0.36	0.36	0.36
63	0.46	0.39	0.37	0.36	0.35	0.35	0.35	0.34	0.34	0.34	0.34	0.34	0.33	0.33	0.33
62	0.43	0.36	0.34	0.33	0.32	0.32	0.32	0.32	0.31	0.31	0.31	0.31	0.31	0.31	0.31
61	0.39	0.33	0.31	0.30	0.30	0.29	0.29	0.29	0.29	0.29	0.28	0.28	0.28	0.28	0.28
60	0.36	0.30	0.28	0.27	0.27	0.27	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.25	0.25
59	0.32	0.27	0.25	0.25	0.24	0.24	0.24	0.24	0.23	0.23	0.23	0.23	0.23	0.23	0.23
58	0.29	0.24	0.23	0.22	0.21	0.21	0.21	0.21	0.21	0.21	0.20	0.20	0.20	0.20	0.20
57	0.25	0.21	0.20	0.19	0.19	0.19	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
56	0.22	0.18	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.15	0.15	0.15	0.15
55	0.18	0.15	0.14	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
54	0.14	0.12	0.11	0.11	0.11	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
53	0.11	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
52	0.07	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
51	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02
50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Note: For negative values of Q_U or Q_L, P_U or P_L is equal to 100 minus the table value for P_U or P_L. If the value of Q_U or Q_L does not correspond exactly to a figure in the table, use the next higher figure.

*Within limits for positive values of Q_U or Q_L.

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Table 106-2. PAY FACTORS

Pay Fac tor	Required Quality Level for a Given Sample Size(n) and Given Pay Factor														
								n=	n=	n=	n=	n=	n=	n=	n=
								10	12	15	19	26	38	70	201
	n=	n=	n=	n=	n=	n=	n=	to	to	to	to	to	to	to	To
	3	4	5	6	7	8	9	11	14	18	25	37	69	200	X
1.05	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1.04	90	91	92	93	93	93	94	94	95	95	96	96	96	97	99
1.03	80	85	87	88	89	90	91	91	92	93	93	94	95	96	97
1.02	75	80	83	85	86	87	88	88	89	90	91	92	93	94	95
1.01	71	77	80	82	84	85	85	86	87	88	89	90	91	93	94
1.00	68	74	78	80	81	82	83	84	85	86	87	89	90	91	93
0.99	66	72	75	77	79	80	81	82	83	85	86	87	88	90	92
0.98	64	70	73	75	77	78	79	80	81	83	84	85	87	88	90
0.97	62	68	71	74	75	77	78	78	80	81	83	84	85	87	89
0.96	60	66	69	72	73	75	76	77	78	80	81	83	84	86	88
0.95	59	64	68	70	72	73	74	75	77	78	80	81	83	85	87
0.94	57	63	66	68	70	72	73	74	75	77	78	80	81	83	86
0.93	56	61	65	67	69	70	71	72	74	75	77	78	80	82	84
0.92	55	60	63	65	67	69	70	71	72	74	75	77	79	81	83
0.91	53	58	62	64	66	67	68	69	71	73	74	76	78	80	82
0.90	52	57	60	63	64	66	67	68	70	71	73	75	76	79	81
0.89	51	55	59	61	63	64	66	67	68	70	72	73	75	77	80
0.88	50	54	57	60	62	63	64	65	67	69	70	72	74	76	79
0.87	48	53	56	58	60	62	63	64	66	67	69	71	73	75	78
0.86	47	51	55	57	59	60	62	63	64	66	68	70	72	74	77
0.85	46	50	53	56	58	59	60	61	63	65	67	69	71	73	76
0.84	45	49	52	55	56	58	59	60	62	64	65	67	69	72	75
0.83	44	48	51	53	55	57	58	59	61	63	64	66	68	71	74
0.82	42	46	50	52	54	55	57	58	60	61	63	65	67	70	72
0.81	41	45	48	51	53	54	56	57	58	60	62	64	66	69	71
0.80	40	44	47	50	52	53	54	55	57	59	61	63	65	67	70
0.79	38	43	46	48	50	52	53	54	56	58	60	62	64	66	69
0.78	37	41	45	47	49	51	52	53	55	57	59	61	63	65	68
0.77	36	40	43	46	48	50	51	52	54	56	57	60	62	64	67
0.76	34	39	42	45	47	48	50	51	53	55	56	58	61	63	66
0.75	33	38	41	44	46	47	49	50	51	53	55	57	59	62	65
NOTE: To obtain a given pay factor, the computed Quality Level shall equal or exceed the value in the table. Delete Pay Factor rows more than 1.0 where quality incentives are not allowed.															

106.04 Certification of Compliance. The Design-BUILDER shall provide a Certificate of Compliance for all materials that are to be permanently incorporated into the Work for which there is no prescribed schedule of acceptance testing by the Department. If more than one product is used for the same purpose, a Certificate of Compliance shall be submitted for each product. Certificates will also be required for temporary, safety-related items, such as guardrail, impact attenuators, traffic control devices, and pavement markings. No payment will be made for any item until the required certificates have been received. The certificate shall show the following:

- (a) Date of certification.
- (b) Description of material supplied.

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- (c) Product Trade Name (as listed on the Qualified Products List, if applicable).
- (d) Name of manufacturer and/or supplier.
- (e) Name of the Design-Builder to whom the material is supplied.
- (f) Project name and number to which the material is consigned.
- (g) Contract item number and Contract item name.
- (h) A statement that the material or assemblies provided fully meets the requirements of the pertinent Contract Specification.
- (i) That records will be maintained for a three-year period as defined below.
- (j) Signature of a person having legal authority to bind the originator of the certificate.
- (k) If the product category is listed on the Department's Qualified Products List, the location where the product was used shall be provided.

Certificates of Compliance may be submitted, by the manufacturer, the supplier, or the Design-Builder. The required Certificate of Compliance form may be obtained online at www.nh.gov/dot/business/contractors.htm or from the Department. In all cases, the Design-Builder shall fill out the project-related location information at the bottom of the form for products listed on the Qualified Products List. The originator of the certificate must maintain all documentation for said certificates for a period of not less than three years from the date the project has been completed and accepted.

Certificates of Compliance covering more than one type of material or item will be acceptable if a listing is made of the item number, name of item, manufacturer, or supplier or both for each material covered.

Materials or assemblies used on the basis of Certificates of Compliance may be sampled and tested by the Department and if determined not to meet Contract requirements will be rejected or accepted under 105.03. All work done to replace or repair defective material shall be at the Design-Builder's expense. This provision shall remain in force for a period of three years from the date of Acceptance.

The following is a list of materials that require Certificates of Compliance. This list is not all-inclusive, as certain special materials not commonly used on all projects will also require certificates.

Bearing Assemblies	Light Pole Bases
Bearing Pads	Liquid Asphalt Materials
Bearing Piles and Permanent Sheeting	Luminaries and Supports
Bounds (Concrete and Granite)	Matting for Erosion Control
Bridge Elastomeric Expansion Devices	Membrane Waterproofing
Bridge Railing and Hardware	Paint for Structural Steel
Castings of Grates, Frames and Covers	Pavement Fabrics
Concrete Curing, Waterproofing, Sealing	Pavement Markings consisting of Tapes,
Agents and Admixtures	Thermoplastics, Markers and Paints
Conduits and Pull Boxes	Permanent/Temporary Lighting Systems
Culverts, Underdrains, Structural Plate Pipe	Pipe and Accessories for Water, Sewer and
and Structural Plate Arches	Drainage
Delineators	Reinforcing Steel
Drainage/Sewer Structures	Shear Connectors
Fence Materials consisting of Posts, Fabric	Sign Materials consisting of Posts, Trusses,
and Hardware	Fasteners, Sheeting and Panels
Geotextiles	Structural Steel
Guardrail consisting of Beam Rail, Posts	Traffic Control Devices
and Fittings	Traffic Signals and Equipment
Impact Attenuators	Waterstops
Joint Sealants	Witness Markers

Supplementing the above certificates, when specified or upon request, the Department shall be furnished with a copy of the manufacturer's certificate of materials showing the physical properties, chemical composition, methods of testing, and other relevant data.

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Products that have been prequalified by Materials and Research and are included on the Qualified Products List (QPL) may be used on projects without further testing, unless otherwise noted on the QPL, but a Certificate of Compliance for the qualified products will be required. The QPL is updated annually, or more frequently if warranted, and is available online at www.nh.gov/dot/. A product that is not listed will not be used until qualified through a written request. Such request should be made with sufficient lead-time to allow necessary testing or research.

106.05 Plant Inspection. The Department may inspect materials at the acquisition or manufacturing source. Manufacturing plants may be inspected for compliance with specified manufacturing methods. Material samples will be obtained for testing for compliance with materials quality requirements. This may be the basis for acceptance of manufactured lots as to quality.

In the event plant inspection is undertaken, the following conditions shall be met:

1. The Department shall have the cooperation and assistance of the Design-Builder and the producer of the materials.
2. The Department shall have full access at any time to all parts of the plant concerning the manufacture or production of the materials being furnished.
3. If required by the Contract, a building shall be provided for the use of the Inspector in which to house the test equipment and perform the required tests. The building shall be located conveniently near the plant, and independent of any use by the material producer.
4. Adequate safety measures shall be provided and maintained.

106.06 Storage and Handling of Materials. Materials shall be stored, handled, and transported to preserve their quality and fitness for the Work.

Materials shall be stored to facilitate prompt inspection and will be subject to inspection and retesting before incorporation in the Work in accordance with 106.03.

Approved portions of the right-of-way may be used for storage of materials and the Design-Builder's plant and equipment, provided that the clear zone restrictions specified in 619 are met. Clearing, grubbing, topsoil removal, and other preparation work or restoration for storage areas, if approved, shall be at the Design-Builder's expense.

Additional space required shall be provided at the Design-Builder's expense and option. Private property shall not be used for storage purposes without written permission of the owner, or lessee and owner. Copies of such written permission can be requested to be furnished to the Department and shall include proposed erosion control and site restoration measures.

Storage and plant sites shall be restored to their original condition, or as directed, by and at the Design-Builder's expense.

Erosion control measures, including dust control required for stockpiles of materials subject to wind or water erosion, shall be by and at the Design-Builder's expense.

106.07 Unacceptable Materials. Materials not meeting the requirements of the Contract will be considered unacceptable and will be rejected and shall be removed immediately from the project unless the defects are corrected and approved by the Department. Should the Design-Builder fail to remove defective materials within the time indicated by the Department in writing, the Department will have the materials removed at the Design-Builder's expense.

106.08 Department-Furnished Material. Material furnished by the Department will be delivered or made available to the Design-Builder at the locations specified in the Contract.

The cost of handling and placing Department-furnished materials after delivery to the Design-Builder shall be included in the Lump Sum Price. The Design-Builder is responsible for materials delivered. Deductions will be made from any money due the Design-Builder for any shortages, deficiencies, and damage that may occur to the material after delivery. Demurrage charges, resulting from the Design-Builder's failure to accept the material at the designated time and location of delivery, will also be deducted from money due the Design-Builder.

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106.09 Conservation of Gravel Deposits. The Design-Builder shall make all reasonable efforts to conserve gravel deposits. Unless specifically authorized, gravel shall not be utilized in making deep fills, backfilling swamps, or dressing slopes. Gravel deposits encountered in the excavation shall be used in the several gravel items in the Contract when identified. Disposal of strippings, overburden, and unsuitable material shall be made in such a manner that usable gravel deposits will not be covered.

106.10 Disposal of Surplus and Waste Materials. When practicable and whenever directed, surplus and waste material shall be disposed of by flattening slopes or for other grading within the project. When specified as embankment-in-place surplus or stockpile surplus, the material shall be placed as shown on the plans. The Design-Builder is responsible for securing disposal areas for surplus and waste materials. Disposal Agreements, as provided by the Department, for such areas must be submitted to the Department for approval. The Disposal Agreement form may be obtained on line at www.nh.gov/dot/business/contractors.htm or from the Department.

106.11 Quality Assurance during Design. To ensure that the Design-Builder's design fulfills the requirements of the Contract, and the materials, equipment, and all elements of the Design-Builder's Work perform satisfactorily for the purpose intended, the Design-Builder shall provide a Design Quality Management Plan (DQMP) for project design. The DQMP shall be prepared and submitted for review and concurrence by the Department. The Design-Builder shall at all times abide by the requirements of this plan. The DQMP shall be submitted within twenty (20) Days of Notice to Proceed.

The DQMP objective is intended to place the responsibility for the quality of the design on the Design-Builder, facilitate construction by the Design-Builder, and allow the Department to fulfill its responsibilities of exercising due diligence in overseeing the design process and products. In no case shall any progress commence until the DQMP is approved by the department.

106.11.1 Plan. The Design-Builder shall submit a DQMP that ensures that all Design Documents are prepared in accordance with generally accepted design and engineering practice and meet all requirements of the Contract. The plan shall:

- A. Describe the quality control and assurance procedures the Design-Builder's design plans, specifications, reports, calculations, and other documentation used for construction will follow for the Project and be organized by design discipline (structural, civil, utilities, etc.). These procedures shall specify appropriate quality requirements and control deviations from such requirements.
- B. Describe the QC/QA procedures for preparing and checking all plans, specifications, calculations, reports, and all other documents that designers will prepare for use by the Design-Builder. Independent checking or back checking of these documents shall be in accordance with industry accepted practices. Computer program verification shall also be included. This shall pertain to all designs including Release for Construction packages issued prior to final design plans.
- C. Describe the procedures for coordinating and ensuring that all work performed by subconsultants and other design disciplines has proper QC/QA as required in the DQMP to ensure that conflicts, omissions, or misalignments do not occur between design discipline drawings or specifications.
- D. Describe the procedures that ensure that the Design-Builder personnel are familiar with the provisions of the Contract Documents concerning their respective responsibilities. Provide for training and certification as appropriate of personnel performing activities affecting or assessing the quality of design and to ensure that the design is performed in accordance with the DQMP and Contract requirements.
- E. Describe the independent quality control and quality assurance organization, including the number of employees with specific quality control and quality assurance responsibilities. A chart showing lines of responsibility shall be included. Persons and organizations performing QC/QA functions shall have sufficient authority to identify quality problems and to initiate, recommend, provide and verify implementation of solutions. Persons performing QC/QA functions shall be at an organizational level that

ensures that the proper performance of their duties is not influenced by the potential impacts to project schedule.

- F. Identify the names, qualifications, duties, and authority of each person assigned as either a QC or QA reviewer. Each person assigned to a QC or QA role shall be exclusively designated as such and will perform no work related to the design that they are reviewing.
- G. Identify the process for all quality audits and also the Release for Construction of Design plans and specifications and clearly state the person responsible for each of these activities. Auditors must be completely independent from the design process.

106.11.2 Quality Assurance Manager for Design. The Quality Assurance (QA) Manager identified in the Proposal is considered one of the Project's key personnel. The QA Manager shall be responsible for the overall management of the design QC/QA process. The QA Manager shall be a New Hampshire Licensed Professional Engineer and shall report to the Design-Build management team. The QA Manager shall have sufficient authority to affect change as necessary to assure quality of the design, and shall not be involved in scheduling, production or budget activities. The DB team must have an active QA Manager at all times.

The Design-Builder shall not replace the QA Manager without prior written approval of the Department. A written request to replace the QA Manager shall name a new QA Manager that will be available for the project within twenty (20) Days of Department approval.

106.11.3 Engineer. The Design Manager shall designate (by name) an Engineer. The Engineer shall be a New Hampshire Licensed Professional Engineer with considerable experience in the subject who is responsible for directly supervising the Design and who will stamp, sign and date all design plans, reports and specifications for a given item or segment of the Work.

106.11.4 Senior Experienced Engineers. The Design-Builder shall provide senior experienced engineers to check all design work. These engineers (Design Checkers) shall be New Hampshire Licensed Professional Engineers in the design discipline and type of work being checked and shall have an equal or higher level of qualification and experience than the engineers performing the design.

106.12 Quality Assurance during Construction. This section contains general provisions related to the Quality of Work including roles, standards, Materials, Quality Control, Acceptance, Independent Verification, Independent Assurance, Non-conforming Work, and warranties.

106.12.1 Roles Regarding Quality.

106.2.1.1 Cooperation. The Design-Builder and the Department will work cooperatively within their respective quality responsibilities to produce and document a high quality project, meeting or exceeding the quality requirements of the Contract.

106.12.1.2 Role of the Design-Builder. The Design-Builder shall be responsible for the quality of construction and materials incorporated into the project. The Design-Builder's Quality Control shall insure that the final product meets all contract requirements and will perform satisfactorily for the purposes intended.

The Design-Builder's Project Manager shall be responsible for all aspects of the quality of construction, including labor, equipment, materials, incidentals, processes, construction methods, and QC testing and inspection.

The Design-Builder shall develop, submit for approval, implement, and adjust if necessary a Construction Quality Management Plan (CQMP) for the work specified which details all activities necessary to assure a high quality project. The CQMP shall also include a Process Quality Control Plan. The CQMP shall establish a clear distinction between QC and Acceptance activities and the personnel performing the QC function. The CQMP shall be administered by an individual that reports to the Design-Build management team and shall have sufficient authority to affect change as necessary to assure a quality project.

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106.12.1.3 Role of the Department. The Department is responsible for approving the CQMP, and assuring that the Design-Builder is following the CQMP. The Department will perform random Independent Verification sampling, testing, and inspection for any element of the Work to ensure compliance with the CQMP and Contract requirements. The Department may also sample and test at any time if the material appears defective or when the Department determines that a change in the process or product has occurred. The Department may perform Independent Assurance sampling and/or testing at any time.

The Department shall be responsible for Acceptance sampling and testing and documentation of Acceptance activities.

106.12.2 Quality Standards.

106.12.2.1 Conformity with Contract. The Design-Builder shall comply with all Contract requirements in performance of the Work. Any required plans such as the CQMP and the SWPPP, as approved by the Department, are binding upon the Design-Builder as Contract requirements.

106.12.2.2 Standards. All work, to the extent applicable, shall conform to the appropriate, related, current editions of the following publications at the time of the Technical and Price Proposal submittal, including, but not limited to:

New Hampshire Department of Transportation:

- A. Division 100 General Provisions for Design-Build Projects
- B. Standard Plans and Standard Details
- C. Standard Specifications with Supplemental Specifications
- D. CADD Standards
- E. Bridge Design Manual
- F. Highway Design Manual
- G. Survey Manual
- H. Right-of-way Manual
- I. Utilities Accommodation Manual

AASHTO:

- A. A Policy on Geometric Design of Highways and Streets
- B. LRFD Bridge Design Specifications with Revisions
- C. Standard Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals
- D. Other applicable AASHTO standards and guide specifications

Highway Research Board:

- A. Highway Capacity Manual, SR 209

U.S. Department of Transportation:

- A. Pertinent Federal-Aid Policy Guides
- B. Rules and Regulations, Federal Highway Administration
- C. Manual on Uniform Traffic Control Devices for Streets and Highways, 2003
- D. Roadside Design Guide
- E. FHWA Right-of-Way Project Development Guide

Deviations from any of those referenced design standards must be justified by the Design-Builder in writing.

106.12.2.3 Conformity with Other Standards. Unless otherwise provided in the Contract, all Work shall conform to the following agency standards as applicable:

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- A. The Department
- B. AASHTO
- C. ASTM
- D. AREMA
- E. Standard conditions and special conditions contained in any permit
- F. Manual for Assessing Safety Hardware
- G. Recommended Procedures for the Safety Performance Evaluation of Highway Features
- H. Manufacturer's Specifications and Recommendations

106.12.2.4 Industry Standards. If there is no applicable standard set forth in this Contract for a particular item of work, then the Design-Builder shall perform that item of work in accordance with industry standards prevailing at the time of bid. If industry standard is used, examples and references shall be provided.

106.12.2.5 Endorsed and Sealed. All plans, specifications, estimates, and data prepared by the Design-Builder shall be signed and sealed with a State of New Hampshire seal by the Design-Builder's Licensed Professional Engineer, Landscape Architect, Professional Geologist, Site Evaluator, Surveyor, Soil Scientist, Appraiser, or other professional, as applicable under New Hampshire State Law.

106.13 Quality Assurance.V

106.13.1 General. The Design-Builder shall develop, submit, and implement a Construction Quality Management Plan (CQMP), approved by the Department, for those items of work specified that will result in work that meets or exceeds the quality requirements of this Contract. The CQMP shall include a Process Quality Control Plan.

- A. Submittal. Within twenty (20) Days of Notice to Proceed or at least thirty (30) days before any related work is to be performed, the Design-Builder shall submit three hard copies of its CQMP to the Department and one electronic copy in pdf format.
- B. Approval. Within five (5) days of receipt, the Department will determine if the CQMP is in accordance with the requirements of 106.13 and:
 - 1. notify the Design-Builder that its CQMP is approved or
 - 2. return it for any needed revisions.

If returned for revision, the Design-Builder shall resubmit three copies and one electronic copy in pdf format of its revised CQMP as provided above within five (5) Days and the Department will have five (5) Days from receipt of the revised plan to notify the Design-Builder whether its CQMP is approved or again requires revision. Additional iterations will occur in a like manner until the Department approves the Design-Builder's CQMP. Failure to submit an approvable CQMP shall not be cause for any adjustment to compensation or time.

Upon final approval of the CQMP, the Design-Builder shall provide five (5) bound copies and one electronic copy in pdf format to the Department. All Design-Builder QC and Acceptance personnel shall also be issued their own copy of the approved CQMP.

The Design-Builder's CQMP shall consist of plans, procedures, responsibilities, authority, and an organizational structure that demonstrates that an effective level of QC will exist and that the end result products will comply with all Contract requirements. The Design-Builder shall provide all necessary QC inspection, sampling, and testing to implement the CQMP. The CQMP shall include an organizational structure and reporting requirements that demonstrate that QC personnel have sufficient independence to allow them to be primarily concerned with quality, as opposed to schedule and budget. All key personnel performing QC functions shall be exclusively designated to such and shall not be assigned to perform conflicting duties or production work. The Department, at its sole discretion, may approve a QA organization that is not a separate entity from the design and production organizations should the Design-Builder demonstrate to the Department how QC functions will be performed independently to maintain the integrity of the process.

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The individual managing the CQMP shall report to the Design-Build management team. The individual shall have full authority and responsibility for assuring effective implementation and maintenance of a quality system and for instituting any and all actions necessary for the successful implementation of the CQMP. The individual is responsible for assuring the existence of information systems that measure the effectiveness of the quality program. The individual shall have access to executive management to report on the performance of the quality system.

The Design-Builder's management with executive responsibility shall review the quality system at defined intervals sufficient to ensure its continuing suitability and effectiveness in satisfying the quality policy and objectives. At least two reviews shall be completed during the project, or two per year for extended projects. The frequency of the reviews shall be dependent on the maturity of the quality system being implemented and the results of the last management review. Minutes shall be taken of the quality review meetings and these minutes shall be provided to the Department.

106.13.2 Quality Control (QC). The Design-Builder shall be responsible for Quality Control to ensure that quality has been incorporated into all elements of work prior to Acceptance activities. The QC activities shall be sufficient in scope to prevent repeated discoveries of non-conforming work by those performing Acceptance testing and inspection. Repeated observations of QC deficiencies shall be considered a CQMP Non-compliance Incident. The Department will not sample or test for process control or assist in controlling the Design-Builder's production operations. The Design-Builder shall provide QC personnel and testing equipment capable of providing a quality product that meets or exceeds the Contract requirements.

106.13.2.1 Process Quality Control Plan Requirements. The PQCP shall include, at a minimum, the following:

- A. All Work items covered by the PQCP
- B. Detailed description of the construction processes that will be used to complete the work items listed above
- C. Sampling locations and techniques
- D. Tests and test methods, which are identified for all required materials and processes.
- E. Testing frequencies
- F. Inspection frequencies
- G. Documentation procedures, including:
 - 1. Inspection and test records
 - 2. Daily reports of production and inspection.
 - 3. Detailed charts on required products.
 - 4. Inventory/production inspection, tracking, sign-off, release.
 - 5. Sample forms and documents for all inspection and tracking.
 - 6. Temperature measurements
 - 7. Accuracy, calibration, or recalibration checks performed on production or testing equipment
- H. Inspection of work process:
 - 1. Identification of work to be performed and progress
 - 2. Confirmation of acceptable production
 - 3. Identification process of deficient production
 - 4. Procedures to affect production to bring back to compliance.
 - 5. Resolutions process of deficiencies and Non-Conformances.
- I. Qualifications of inspection staff
- J. Design-Builder's QC organizational chart and description of responsibilities

The PQCP shall identify the Design-Builder's QC personnel, including the Design-Builder's Project Manager, and all QC individuals reporting to the Project Manager, responsible for administering the PQCP. The PQCP shall include the number of employees with specific quality control responsibilities, including, but not

limited to, individuals responsible for conformance with Project standards, documentation, and material testing, including: fill materials, Hot Mix Asphalt (HMA), concrete, and any other material to be used in the construction of the Project. The organizational chart shall include lines of responsibility. It shall also identify process notification procedures to key individuals to maintain proper control of production. It shall clearly identify how the QC program is integrated into the production process to maintain contract requirements.

The PQCP shall clearly identify the entire process of inspection, testing, sign-off, notification, documenting, record keeping, identifying, tracking, replacing, controlling and inspecting subcontractors including receiving subcontractors QC plans and administering process review. The intent of the PQCP is to provide a clear procedure to explain and follow for all the anticipated events concerning the inspection and Quality Control process to maintain all the contract and document requirements.

106.13.2.2 Acceptance. The Department shall be responsible for determining the acceptability of the Work. Acceptance of the Work is based on the visual inspection of the materials and workmanship, monitoring of the QC process, and Acceptance Test results. Acceptance sampling and testing is the responsibility of the Department, unless alternate procedures are specified. The Department's Acceptance inspectors and technicians will not sample or test for process control or assist in controlling the Design-Builder's production operations. Acceptance sampling and testing will be for the sole purpose of determining the acceptability of the work. The results of all Acceptance tests shall be documented and reported to the Design-Builder's Construction Quality Manager and to the Department.

106.13.2.3 QC and Acceptance Personnel Qualifications. The Design-Builder's QC Inspectors shall hold all certifications from NETTCP that apply to the items included in the CQMP. The Department will require the Design-Builder to remove Inspectors from the Project that are not certified as required or that are otherwise unqualified or unable to fulfill their duties in a good and workmanlike manner.

The Design-Builder shall not replace the Construction Quality Manager without prior written approval of the Department. The Design-Builder shall always have a Construction Quality Manager while under contract with the department. A written request to replace the Construction Quality Manager shall name a new Construction Quality Manager that will be available for the project within twenty (20) Days of Department approval.

106.13.2.4 Inspection Requirements. The CQMP shall cover all construction operations on the site and at off-site production facilities, keyed to the proposed construction materials, sequence, and schedule. The CQMP shall also identify QC personnel (including qualifications), procedures, controls, tests, records, and forms to be used.

The Design-Builder shall provide a copy of each completed QC report to the Department by 1:00 PM on the day following each construction activity, unless other arrangements are made with the Contract Administrator. Failure to provide this report will constitute non-compliance with the CQMP and the Contract.

If an item is required to be in the CQMP but QC Inspection requirements are not specified in the Contract, the Design-Builder shall propose inspection and record keeping requirements for such items in the CQMP.

106.13.2.5 CQMP Non-Compliance. The Design-Builder shall comply with the approved CQMP and shall take all other steps necessary to assure a high quality project.

Failure by the Design-Builder to comply with the approved CQMP will result in the following actions:

- A. 1st Incident: Written warning. If the Design-Builder does not take corrective action upon receipt of written warning, the Department will escalate immediately to the 2nd Incident.
- B. 2nd Incident: Mandatory work suspension until compliance and loss of one percent (1%) of the value of the work item covered by the CQMP, as described in this Section.
- C. 3rd Incident: Mandatory work suspension until compliance and loss of an additional two percent (2%) of the value of the work item covered by the CQMP, as described in this Section.
- D. 4th and subsequent Incidents: Mandatory work suspension until compliance and loss of an additional three percent (3% - At this point for a total of 6%) of the value of the work item (each occurrence) covered by the CQMP, as described in this Section.

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Disincentives for failure to comply with the approved CQMP are additive, and the Department will deduct any disincentives due from amounts otherwise due the Design-Builder. These disincentives are intended to encourage the Design-Builder to comply with its approved CQMP, and are not related to the quality of the material provided.

106.13.2.6 Independent Verification. The Department may conduct Independent Verification by:

- A. Review of QC Reports.
- B. Random inspection of work.
- C. Independent Verification Sampling and Testing

106.13.2.7 Non-Conforming Work. A non-conformance shall be defined as any condition in equipment, materials, or processes which does not comply with required drawings, specifications, codes, standards, documentation, records, procedures, CQMP or DQMP, or Contract requirements which cause the acceptability of equipment, materials, or processes to be unacceptable or indeterminate.

Non-conforming product shall be reviewed in accordance with documented procedures, and if required:

- A. Reworked to meet the specified requirements;
- B. Reworked in accordance with a Department approved rework procedure;
- C. Regarded for alternative applications; or
- D. Rejected or scrapped.

Repaired and/or reworked product shall be re-inspected in accordance with the CQMP and/or other documented procedures.

106.13.2.8 Substantially Conforming Work. If the Department determines that non-conforming work substantially conforms to the Contract, the Department may accept the non-conforming work, provided that the Department may require a credit to the Department to be deducted from amounts otherwise due the Design-Builder. If the Department and Design-Builder cannot agree to the amount of the credit, the work shall be unacceptable work.

106.13.2.9 Unacceptable Work. The Design-Builder shall remove, replace, or otherwise correct all unacceptable work as directed by the Department at the expense of the Design-Builder, without cost or liability to the Department.

106.13.2.10 Unauthorized Work. Prior to Final Acceptance and upon written order by the Department, the Design-Builder shall remove or uncover unauthorized work. After examination, the Design-Builder shall rebuild the uncovered work to a condition conforming to the Contract at the expense of the Design-Builder and without cost or liability to the Department. Any delay arising from unauthorized work shall be an inexcusable delay.

106.13.2.11 Uninspected Work. Prior to Final Acceptance and upon written order by the Department, the Design-Builder shall uncover uninspected work. After examination, the Design-Builder shall rebuild the uncovered work to a condition conforming to the Contract.

106.14 Warranty Provisions.

106.14.1 Warranty by Design-Builder. This Section provides requirements for warranted asphaltic pavement and roadway structures. For items that do not otherwise have specific warranty requirements identified in the Project Requirements in the RFP, the Design-Builder unconditionally warrants and guarantees that the

Project will be free from warranty defects for one year from the date of Final Acceptance. Final Acceptance includes receipt of all conforming Closeout Documentation. For a related provision, see 105.17.

If the Department discovers any warranty defects during the warranty period, the Design-Builder agrees to promptly perform all Remedial Work at no additional cost or liability to the Department.

The Design-Builder unconditionally warrants and guarantees the pavement constructed under this Contract to be free from Pavement Defects as defined herein, and accepts responsibility for the asphaltic mixture(s), the pavement performance, and warranty work for the finished roadway following completion of the asphaltic pavement for a period specified in this Section.

The Design-Builder also unconditionally warrants and guarantees certain bridge structures and related items, as specified herein, constructed under this Contract to be free from Defects for a period of at least one (1) year from the date of Final Acceptance by the Department.

106.14.2 Warranty Definitions. Notwithstanding any other provision of the Contract, the following words or phrases have the following definitions for the purposes of the Design-Builder's warranty obligation under this Contract.

- A. Adhesive Failure. Loss of bond (i.e. between the joint and the joint reservoir; between the aggregate and the binder).
- B. Approach Slab. Section of pavement just prior to joint, crack, or other significant roadway feature relative to the direction of traffic (see also leave slab).
- C. Binder. Brown or black adhesive material used to hold stones together for paving.
- D. Bituminous. Like or from asphalt.
- E. Bleeding. Identified by a film of bituminous material on the pavement surface that creates a shiny, glass-like, reflective surface that may be tacky to the touch in warm weather.
- F. Bridge Deck Joints. Any joint in the riding surface for the purpose of expansion control.
- G. Centerline. The painted line separating traffic lanes.
- H. Chipping. Breaking or cutting off small pieces from the surface.
- I. Coating System. Materials preparation for coating, touchup, and the coating applied to structural steel beams, girders, diaphragms, and miscellaneous steel element which comprise a structural steel system.
- J. Cohesive Failure. The loss of a material's ability to bond to itself. Results in the material splitting or tearing apart from itself (i.e., joint sealant splitting).
- K. Concrete Wearing Surface. Fifty millimeter thick non-reinforced Portland cement riding surface bonded to the superstructure slab.
- L. Defects. Defects in design, manufacture, and/or workmanship that result in the conditions listed in the "Definition of Defects" sections of this Section. Defects do not include normal wear and tear. Defects also do not include conditions caused by factors clearly beyond the Design-Builder's control and not attributable to defective design, material, manufacture, or workmanship including fires, floods, abnormal weather beyond design parameters, accidents, vandalism, abnormal maintenance activities, or acts of God.
- M. Durability Cracking. The breakup of concrete due to freeze-thaw expansive pressures within certain aggregates. Also called "D" cracking.
- N. Edge Cracking. Fracture and materials loss in pavements without paved shoulders which occurs along the pavement perimeter. Caused by soil movement beneath the pavement.
- O. Emergency. Emergency means necessary for public safety or convenience, as determined by the Department.
- P. ESAL. The Equivalent Single Axle Load as specified in the AASHTO. Guide for the Design of Roadway Structures (1993).
- Q. Fatigue Cracking. A series of small, jagged, interconnecting cracks caused by failure of the asphalt concrete surface under repeated traffic loading (also called alligator cracking).
- R. Hairline Crack. A fracture that is very narrow in width, less than 3 mm.

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- S. Joint Seal Damage. Any distress associated with the joint sealant, or lack of joint sealant.
- T. Longitudinal. Parallel to the centerline of the pavement.
- U. Pavement Structural Section. Includes:
1. The Subgrade;
 2. the combination of Subbase, Base Course and Surface Course placed on a Subgrade to support the traffic load and distribute it to the Roadbed in the Project; and
 3. the Shoulders, located within the Transportation Facilities, as defined by a line descending vertically from the outermost edge of the Shoulder to and including the Subgrade.
- V. Pavement Defect. Any condition that does not meet the Pavement Performance Criteria set forth in Table 1 in this Section.
- W. Popouts. Small pieces of pavement broken loose from the surface.
- X. Pothole. A bowl-shaped depression in the surface.
- Y. Promptly. Unless an emergency, "Promptly" means in the first construction season after the Design-Builder has been notified of the defect(s), but always within one year of such notice. In case of emergency, Promptly means within forty-eight (48) hours.
- Z. Raveling. The wearing away of the pavement surface caused by the dislodging of aggregate particles.
- AA. Reflection Cracking. The fracture of asphalt concrete above joints in the underlying concrete pavement layer(s).
- BB. Remedial Work. All work necessary to make the item in like new condition as reasonably determined by the Department and performed in accordance with the Contract and in a good and skillful manner. Remedial Work includes all design, permitting, project management, supervision, materials, and labor, including erosion control and traffic control.
- CC. Rutting. Longitudinal surface depressions in the wheelpaths.
- DD. Segment. A portion of the roadway as described herein.
- EE. Shoving. Permanent, longitudinal displacement of a localized area of the pavement surface caused by traffic push-surfacing against the pavement.
- FF. Transverse. Perpendicular to the pavement centerline.
- GG. Warranty Defects. Conditions that result from material, manufacture, or workmanship and that are not in conformity with the Contract or with industry standards applicable to the work prevailing at the time of submission of the Proposal. Warranty defects do not include:
1. normal wear and tear;
 2. conditions caused by occurrences clearly beyond the Design-Builder's control and not attributable to material, manufacture, or workmanship; and
 3. Defects in landscape items that are the subject of Landscape Establishment Period Obligations.

Examples of such excepted occurrences might be fires, floods, abnormally poor weather for the site of work, accidents, improper use, improper maintenance, vandalism, or acts of God.

- HH. Water Bleeding. Seepage of water from joints or cracks.
- II. Waterproofing Membrane. Product that is bonded to the concrete bridge deck prior to placing hot bituminous pavement wearing surface for the purpose of protecting the bridge deck from the intrusion of chlorides that pass through the bituminous wearing surface.
- JJ. Any terms not defined herein shall have the meanings contained in the publication entitled "Distress Identification Manual for the Long Term Pavement Performance Project," published by the National Academy of Sciences, Publication No. SHRP-P-338, copyright 1993.

106.15 Pavement Warranty.

106.15.1 Process Quality Control Plan (PQCP). The Design-Builder will establish the job mix formula and select all materials to be used. Prior to construction, the Design-Builder will provide the Department with a PQCP. The PQCP shall include, at a minimum, the following:

1. Job Mix Formula (JMF) with all computations, JMF testing, and a list of materials;
2. Hot mix asphalt plant details;
3. Stockpile management;
4. Make and type of pavers;
5. Mixing and transportation method(s);
6. Lay-down and compaction methods;
7. Segregation control actions;
8. Quality Control testing personnel, frequency, and methods; and
9. The name and duties/responsibilities of the QC Plan Administrator.

The provisions of the warranty work will apply to all asphaltic mixtures placed as mainline pavement, integrally placed shoulders.

The Design-Builder shall submit all modifications to the PQCP to the Department. The Design-Builder shall provide a copy of all quality control data to the Department at project completion. The Department may conduct tests at its own expense.

106.15.2 Pavement Warranty Period. The term of the warranty shall commence when the entire facility is open to public traffic and shall continue until the earlier of the following:

1. A minimum period of one (1) year from the date of Final Acceptance by the Department. The Design-Builder may propose additional one (1) year increments for a period of up to five (5) years following the expiration of the initial one (1) year term. If any Defects are discovered during said warranty period, the Design-Builder agrees to promptly perform the Remedial Work specified below in good and workmanlike matter at no cost to the Department.
2. To the end of the calendar year in which the cumulative ESALs for a particular Segment or location reach or exceed the amount determined by the information provided in the RFP. Expiration of the Warranty of one Segment shall not affect the Warranty for other Segments.

During the Warranty Period, The Design-Builder may monitor the pavement using nondestructive procedures. The Design-Builder shall not perform coring, milling, destructive procedures, or any Work without prior approval of the Department. All holes cut by the Design-Builder shall be filled in an acceptable manner within twenty-four (24) hours. The Design-Builder will not be responsible for damages as a result of coring, milling, or other destructive procedures conducted by the Department.

106.15.3 Pavement Performance Criteria. The minimum acceptable criteria for the Pavement over the term of the Warranty and, if necessary, the Remedial Work required are identified in Table 106-3 Pavement Performance.

The performance criteria set forth below are to be interpreted in accordance with the definitions for cracking, rutting, raveling, and potholes, etc. above, and as found in the Distress Manual for the Long-Term Pavement Performance Project, SHRP P-338, SHRP Program, NRC, Washington D.C., (1993).

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TABLE 106-3 PAVEMENT PERFORMANCE

Performance Item	Threshold Value	Remedial Work Required
Smoothness, IRI, (inch/mile)**: Average of both wheelpaths in a 5000-foot section	Initial inspection: > 80 inch/mile Final inspection: > 125 inch/mile	Apply a microsurface or 1-1/4" overlay Remove and replace surface layer
Rutting (inch) Average rut depth over a 500-foot segment	> 0.25 inch > 0.75 inch	Apply a microsurface or 1-1/4" overlay Remove and replace affected layer(s).
Transverse Cracking Number of transverse cracks $\geq 0.25''$ average width in a 500' segment	≥ 10 cracks	Remove and replace distressed layer(s). The removal area shall be equal to 110% of the distressed surface to a depth not to exceed the warranted pavement.
Longitudinal cracking* (ft) Total linear feet of longitudinal cracking ≥ 0.5 inch average width in a 500-foot segment	> 50 feet	Remove and replace distressed layer(s). The removal area shall be equal to 110% of the distressed surface to a depth not to exceed the warranted pavement.
Raveling and Popout (ft ²) Total area(s) in a 500-foot segment	> 50 ft ²	Apply a microsurface or 1-1/4" overlay.
Pot Holes	Existence of potholes in a 500-foot segment	Remove and replace distressed area(s). The removal area will be equal to 150% of the distressed area to a depth not to exceed the warranted pavement.
Shoving **	Existence of shoving in a 500-foot segment	Remove and replace shoved layer(s). The removal area shall be equal to 110% of the shoved surface to a depth not to exceed the warranted pavement depth.
Roadway Settlement: Maximum (inch) within 100 feet of abutments and extending in the transverse direction from roadway edge to roadway edge Maximum (inch) beyond 300 feet of abutments and extending in the transverse direction from roadway edge to roadway edge	2 inches 3 inches	Remove and replace affected area(s). Affected area may include the subgrade and subbase layers, or any layer of Pavement, as defined in Section 11.2.

* Longitudinal cracking includes joint separations

** Shoulders are not warranted for smoothness or shoving

106.15.4 Pavement Defects and Remedial Work. The Design-Builder must promptly perform the corresponding Remedial Work set forth in Table 106-3 of this Section for all Defect(s) discovered during the warranty period.

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106.15.5 Pavement Warranty Inspections. Pavement distress inspections will be conducted by dividing the Project into nominal 500 foot Segments. Two (2) 500 foot Segments will be selected by the Department and evaluated for the duration of the warranty period. In addition, the first 100 feet behind each abutment, and one (1) random 500 foot Segment per 0.5 mile section, will be selected annually and evaluated by the Department.

The Department will conduct the inspections annually. The Design-Builder will be notified in advance of the inspection. The results will be made available to the Design-Builder and FHWA within ten (10) Days after the completion of the inspections. If the Design-Builder disputes the inspection findings, the Design-Builder must notify the Department within ten (10) Days of receipt.

The Design-Builder shall promptly perform the specified Remedial Work in all Segments of the Project where a Defect(s) exists. If areas outside the inspection segments appear to contain a Defect, the Department will divide the entire project into 500 foot Segments and inspect the entire project for Defects. Remedial Work will be performed on the entire Segment(s) in which the Defect exists unless otherwise specified in the corresponding Remedial Work. If at anytime during the Warranty Period thirty percent (30%) or more of the Project Segments require or have required Remedial Work, then the entire project will receive Remedial Work as determined by the Department. Remedial Work required on the mainline roadway will also be performed on the asphaltic concrete shoulders and adjacent land(s) unless the Department otherwise directs.

106.15.6 Exclusions. The Design-Builder shall have no responsibility under the Warranty for any failure of the Pavement to satisfy the Contract requirements as a result of:

1. Destruction. Damage to the Pavement due to snow plows, vandalism or cuts for utility crossings or installations or, unless such event is caused by the Design-Builder, damage due to accidents or spills and releases of Hazardous Materials.
2. Uncontrollable Events. Damage to the Pavement due to a natural disaster within the meaning of 23 C.F.R. Section 668.103 or damage to the Pavement due to uncontrollable events as defined in Section 101.2 of the Design-Build General Provisions, including but not limited to a Fifty (50) Year Flood Event, collapse, subsidence, falling rocks, explosion, fire or Act of God.
3. Civil Strife and Hostilities. Damage to the Pavement due to civil strife or hostilities, including but not limited to strikes, civil commotion, civil strife, riot, terrorism, sabotage, acts of civil or military authorities or an Act of War (declared or undeclared).
4. Mobilization. Damage to the Pavement due to weapon discharges or caused by military equipment or heavy construction equipment resulting from responses to mobilization of military or emergency forces.

In addition, the Design-Builder shall have no responsibility for, and the Warranty shall not extend to, work, materials, equipment and costs associated with vegetation control, landscape maintenance, litter control, Right-of-Way fence maintenance, courtesy patrol, Pavement markings repair, repair of overhead and roadside signs, delineations and object markers repair, impact attenuators repair, lighting maintenance, sweeping, guardrails and barriers repair, Structures inspection, retention ponds/detention basins/outfalls repair, and snow and ice control.

106.16 Bridge Warranty.

106.16.1 One (1) year Warranty Items. The Design-Builder hereby unconditionally warrants and guarantees the following items of Work to be free from Defects for a period of one (1) year from the date of Final Acceptance by the Department:

1. Bridge Deck Joints (if used); and
2. Waterproofing Membrane (if used).

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The Design-Builder is not required to provide a warranty for Bridge Deck Joints if a jointless bridge is provided. The Design-Builder is not required to provide a warranty for Waterproofing Membrane if a bridge deck is provided.

If any defects are discovered during said Warranty Period, the Design-Builder agrees to undertake the Remedial Work specified in this Section in a good and workmanlike manner at no cost to the Department.

106.16.2 Bridge Deck Joints.

106.16.2.1 Definition of Defect. Bridge deck joints will be considered defective if any of the following conditions are discovered within one (1) year warranty period.

- Water leakage through the joint or joint trough;
- Separation of the seal from the steel or concrete substrate;
- Failure of materials such as cracking, chalking, scaling, peeling, splitting;
- Sagging of elastomeric seal;
- Warping of the steel plate or extrusion detrimental to the functioning of the joint;
- Spalling or delamination of the deck concrete within 1.5 feet either side of the joint.

106.16.2.2 Remedial Work Required. Damaged seals shall be removed and replaced with new seals. Seals that are displaced shall be completely removed; the joint shall be cleaned, and the seal may be reinstalled if not damaged during removal. Steel components that are damaged or misaligned shall be restored in a manner approved by the Department.

106.16.3 Waterproofing Membrane.

106.16.3.1 Definition of Defect. Membrane waterproofing will be considered defective if any of the following conditions are discovered within the one (1) year warranty period.

1. Evidence on the bottom of the bridge deck that indicates the membrane is leaking;
2. Pavement pot holes or shoves such that the membrane exhibits physical damage;

Membrane exhibits damage from an operation by the Design-Builder during any possible pavement rehabilitation either during construction or as a result of required warranty repairs.

106.16.3.2 Remedial Work Required. When damage and/or leakage is found, enough pavement shall be removed to expose the affected membrane and allow replacement membrane to be applied in accordance with the manufacturer's recommendations. In no case shall membrane be installed that has up slope joints that are constructed in a shingle pattern. The affected membrane shall be completely removed and replaced. The pavement joints must be staggered square butt joints. All pavement, pavement markings, and rumble strips shall be replaced upon completion of the pavement.

106.16.3.3 One (1) year Warranty Items. The Design-Builder hereby unconditionally warrants and guarantees the following items of Work to be free from Defects for a period of one (1) year from the date of Final Acceptance by the Department:

1. Bearings and
2. Concrete Wearing Surface.

If any Defects are discovered during said warranty period, the Design-Builder agrees to undertake the Remedial Work specified by the RFP in a good and workmanlike manner at no cost to the Department. A warranty is not required for Concrete Wearing Surface if a bituminous wearing surface is provided; however, a warranty would then be required for Pavement and Waterproofing Membrane as described herein.

106.16.3.3.1 Bearings.

106.16.3.3.1.1 Definition of Defect. Bearings shall be considered defective if any of the following conditions are discovered within the one (1) year warranty period.

1. There is evidence of failure of any of the components of the bearing assembly;
2. The protective coating on the bearing cracks, checks, or peels or rusting is present; or
3. The bearing freezes or otherwise fails to allow the bridge to move as designed.

106.16.3.3.1.2 Remedial Work Required. Bearings shall be removed and either replaced or restored to new condition and be reinstalled.

106.16.4 Blank.**106.16.5 Steel Coating Systems.**

106.16.5.1 Definition of Defect. The coating systems shall be considered defective if any of the following conditions are discovered within the one (1) year warranty period.

1. There is visible rust or rust break through;
2. There is blistering, peeling, or scaling of coating;
3. Coating applied over dirt, debris, blasting debris, mill scale, or rust products;
4. Incomplete coating or coating thickness less than specified by the manufacturer;
5. Damage to the coating system due to the Design-Builder's operations during construction;
or
6. Fading or chalking of paint.

106.16.5.2 Remedial Work Required. Repair as directed by the coating manufacturer's technical department.

106.16.6 Concrete Wearing Surface.

106.16.6.1 Definition of Defect. Concrete Wearing Surfaces shall be considered defective if any of the following conditions are discovered within the one (1) year warranty period.

1. Wearing surface exhibits cracking deeper than one-half (0.5) inch for a total length of crack of one hundred and fifty (150) feet;
2. Wearing surface becomes debonded from the deck;
3. There is spalling of individual areas greater than fifteen (15) square inches or a cumulative area of one hundred (100) square feet; or
4. Chlorides penetrate the wearing surface to a depth of more than one (1) inch with a content above 0.01 pounds per cubic foot.

106.16.6.2 Remedial Work Required. Debonded concrete shall be removed and replaced. Small local patches will not be allowed. Removal must extend from curb to curb and the transverse joints must be square to the centerline. Concrete with high chlorides shall be treated as debonded. Cracked concrete shall be repaired by epoxy injection or removal and replacement identical to debonded. If epoxy injection is used the Design-Builder must demonstrate that the injection is complete and effective. Non-complete injection shall result in the wearing surface having to be removed and replaced as debonded.

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106.16.7 Bridge Warranty Inspections.

106.16.7.1 General. Inspections normally will consist of a detailed visual inspection. All components will be inspected and photos will be taken. It is anticipated the inspections will take approximately two (2) Days in the field. The Design-Builder's Price must include its costs related to all regularly scheduled inspections. All inspectors for the Department shall be qualified NBIS inspectors and the Design-Builder is encouraged to have inspectors present during all inspections.

If the Department determines that visual inspections indicate that further inspection is warranted, the Department will undertake whatever further tests or inspections it determines are necessary. If said further inspection reveals Defects, then the Design-Builder will be responsible for all corrective work and the costs of such additional inspection. If said further inspection reveals no Defects, the Department will be responsible for all costs of such additional inspection.

After inspection, the Department will prepare and distribute a draft inspection report. Comments or objections to the draft inspection report must be in writing, must address specific issues, and must be received within ten (10) Days of the draft inspection report. If no comments are received within this time period, the draft report shall stand as written. If comments are received, the Department will issue a final report after considering such comments. Comments from NBIS certified inspectors or New Hampshire Licensed Professional Engineers experienced in bridge evaluation will be given greater weight by the Department.

106.16.7.2 Initial Warranty Inspection. The Initial Warranty Inspection shall be the Final Inspection provided in 107.8.3 of the Design-Build General Provisions.

106.16.7.3 Periodic Inspections. Inspection shall take place at the end of the one year warranty period. This will be the final warranty inspection. A final warranty inspection shall take place sometime during the last year of the warranty periods. The Department will notify the Design-Builder of the time and date of the inspection at least two weeks prior to the inspections. The Design-Builder or its representatives are encouraged to attend.

106.16.8 Remedial Work Procedure – Pavement and Bridge. Within thirty (30) Days of notification of the discovery of Defects and prior to starting any Remedial Work, the Design-Builder shall submit to the Department in writing the precise scope of proposed Remedial Work (which must meet the requirements of this Section) and a schedule of work for approval. All Remedial Work shall meet the Department's Standard Specifications, Supplemental Specifications, and applicable Special Provisions in effect at the time the Contract is executed. Once the Remedial Work Plan is approved, the Design-Builder shall promptly perform the Remedial Work. The Department shall have the right to fully inspect all operations. The Design-Builder shall provide the Department safe access to the Work for inspection purposes.

The Design-Builder shall provide any and all Department permit costs, and traffic control complying with the standards set forth in the RFP. The Design-Builder shall maintain two lanes of traffic open to the public at all times while conducting Remedial Work. Remedial Work may be delayed without liability to the Department if the Department reasonably determines that the Remedial Work is not in compliance with the Contract, threatens public safety, or significantly affects public convenience.

The Design-Builder will have the first option to perform the Remedial Work. If, in the opinion of the Department, the problem requires immediate attention for safety of the traveling public, and the Design-Builder cannot perform the Remedial Work within eight (8) hours, the Department may have the Remedial Work performed by other forces and invoice the Design-Builder accordingly. Remedial Work performed by other forces will not alter the requirements, responsibilities, or obligations of the warranty.

If Remedial Work necessitates a corrective action to the pavement markings, adjacent lanes(s), roadway shoulders, curbing, catch basins, or other highway appurtenances, then such corrective actions will be the responsibility of the Design-Builder.

If any one or more of the following occurs, then the Department may perform or contract for such remedial work and the Design-Builder will be responsible for all claims, costs, damages, losses, and expenses arising out of such work including fees and charges of engineers, consultants, attorneys, dispute resolution professionals, and court costs.

- A. The Design-Builder fails to submit a Remedial Work Plan.
- B. The Design-Builder does not comply otherwise with written instructions from the Department.
- C. A State of emergency exists in which delay would cause serious risk of loss or damage.

Upon a final inspection satisfactory to the Department, the Department will issue a written acceptance of the remedial work. The Design-Builder warrants and guarantees all remedial work to be free from warranty defects for one year after such acceptance.

106.16.9 Bonds and Insurance Covering Warranty Obligations. Before Final Acceptance of the Project, as provided in Section 105.17 of the Design-Build General Provisions, the Design-Builder must provide bonds and insurance assuring the proper and prompt performance of all warranty obligations of the Design-Builder for a minimum period of one (1) year from the date of Final Acceptance. The bond(s) must be in an amount of not less than \$1,000,000.

Insurance coverage may consist of project specific tail policies on the Designer's Professional Liability (E & O) and any other E & O policies (including the Design-Builder's) that is required pursuant to 110.3.4 of the Design-Build General Provisions, with policy amounts as stated in said Contract Section.

106.16.10 Maintenance During Warranty Periods. During the warranty periods, the Department agrees to maintain the Project in accordance with the Department's standard maintenance policies for similar projects. The Design-Builder specifically acknowledges that the level of maintenance shall not be controlled by the maintenance schedules submitted by the Design-Builder with its Proposal.

106.16.11 Other Warranty Provisions. Final Acceptance by the Department of any warranted item or any part thereof during the original construction shall not relieve the Design-Builder of any responsibility under this warranty.

The Design-Builder acknowledges that the warranty obligations set forth in this Contract must be reported as an outstanding obligation in the event of:

- 1. dissolution of (or other analogous term denoting the ending of) the legal organizational existence of the Design-Builder or
- 2. the sale, merger, or cessation of operations of the Design-Builder.

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SECTION 107 -- LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

107.01 Laws to be Observed. The Design-Builder shall keep fully informed with, and observe and comply with all Federal and State laws, all local laws and ordinances, and regulations, orders, and decrees of bodies or tribunals having any jurisdiction or authority, that affect individuals engaged or employed on the Project, or that affects the conduct of the Work on the Project. The Design-Builder shall protect, defend, and indemnify the Department and its representatives against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree, whether by the Design-Builder, Subcontractor(s) at any tier, suppliers of materials or services, or others engaged by the Design-Builder, or their employees.

The Department is to be notified immediately in writing if any discrepancy or inconsistency is discovered between the Contract and any law, ordinance, regulation, order, or decree except as noted in 107.04.

The Design-Builder's attention is called to RSA 275:43, which provides for weekly payment to employees, and to RSA 235:37, which provides requirements relative to worker's compensation. The latter statute provides that the Commissioner of Transportation shall require every private Design-Builder engaged in construction or maintenance work by Contract with the State, a county, a city or town, on any State, State-aid, or town-aid highway or bridge project to file with the Commissioner of Labor and the Commissioner of Transportation of the State a declaration of acceptance of the provisions of RSA Chapter 281-A, Worker's Compensation, as amended, before any Work is begun on such project.

Bulletin Board Requirements: The Design-Builder shall erect and maintain a bulletin board on which to post the notices, rates, and related items that are required to be posted. The board shall be large enough to allow sufficient space, without overlapping, for both State and Federal poster/information, as required. Additional work classifications and their rates, requested by the Design-Builder and subsequently approved by the USDOL, shall also be posted. Bulletin boards shall be an enclosure and the posted documents shall be protected from the elements by glass or Plexiglas. Boards shall be erected on the site of work, be placed in a conspicuous and accessible location where it can be easily seen by all workers. The bulletin board shall remain the property of the Design-Builder and shall be removed upon completion of the Work.

Except for Work done under items in the Contract, work prescribed in this section will not be paid for separately but will be considered as subsidiary.

The Contractor's attention is further called to RSA 281-A:18, which reads in part:

"281-A:18 Contractor's Liability for Subcontractors. A Contractor who subcontracts all or any part of a Contract shall bear the liability of the Subcontractor of that contract for the payment of compensation under this chapter to the employees of the Subcontractor, unless the Subcontractor has secured the payment of compensation as provided for in this chapter. Any Contractor who shall become liable for compensation under this section may recover the amount of the compensation paid and necessary expenses from the Subcontractor. ..."

The Contractor's attention is further called to RSA 266:72, which reads in part:

"266:72 Spillage of Material.

- I. No vehicle shall be driven or moved on any way unless such vehicle is so constructed or loaded as to prevent any of its load from dropping, sifting, leaking or otherwise escaping therefrom, except that sand may be dropped for the purpose of securing traction, or water or other substance may be sprinkled on a way in cleaning or maintaining such way.
- II. No person shall operate on any way any vehicle with any load unless said load and any covering thereon is securely fastened so as to prevent said covering or load from becoming loose, detached or in any manner a hazard to other users of the way. Without limiting the foregoing provision, no person shall drive on any way any open vehicle loaded with earth, sand, asphalt, stone, gravel or other particulate substance unless said vehicle is equipped with and said load is entirely covered and secured by a close-fitting tarpaulin or similar covering which prevents the escape of any substance from said load onto the way.

- III. Any person who violates the provision of this section shall be guilty of a violation if a natural person, or guilty of a misdemeanor if any other person. Any person shall be liable to the state or town for any damage done to the way by spillage.
- IV. The provisions of paragraphs I, II, II-a, and III of this section shall not apply to a local farmer transporting his own farm products or materials incidental to his farming operations where such transporting requires incidental use of a way provided that such farmer shall not thereby be relieved of his duty to exercise reasonable care in carrying on such operations.
- V. The provisions of paragraph II and II-a shall not apply to:
 - (a) The operation of highway building equipment as defined in RSA 259:42 and motor vehicles used in the construction of highways provided that such equipment or motor vehicle is used within a highway construction zone as prescribed by the Commissioner of Transportation provided that the driver of any such vehicle shall not thereby be relieved of his duty to exercise reasonable care;
 - (b) The operation of municipal and state highway maintenance equipment;
 - (c) The driving of any vehicle on a way at speeds of less than 30 miles per hour.” (50 km/h)

Extensions to a Construction Zone allowed by the Commissioner will not waive the requirement for covered loads beyond such limits.

Projects in this State occur within watersheds under the management of the New Hampshire Department of Environmental Services, Water Division (WD). The purpose of part Env-Ws 1700 of the NH Code of Administrative Rules is to “establish water quality standards for the State’s surface water uses as set forth in RSA 485-A.” The Design-Builder must take extraordinary and sufficient precautions to prevent the runoff of fuels, oils, bitumens, calcium chloride, or other polluting materials, harmful to humans, fish, or other life, into the water supplies and surface waters of the State.

Unless otherwise permitted by the WD, control measures must be adequate to assure that turbidity in the receiving water due to the runoff of silt and clay will not be increased to more than ten (10) nephelometric turbidity units (NTU) above naturally occurring conditions in Class B waters. Class A waters shall contain no turbidity, unless naturally occurring. Proper planning and scheduling of construction operations are major factors in controlling erosion. Construction of drainage facilities and performance of other Work that will contribute to the control of erosion and sedimentation shall be carried out concurrently with earthwork operations or as soon thereafter as practicable. Where there is a high potential for erosion and subsequent water pollution, the duration of the exposure of the uncompleted construction to the elements shall be kept to a minimum. Fine material placed or exposed during the Work shall be so handled and treated as to minimize the possibility of its reaching any stream or water supply. Diversion channels, dikes, sediment traps, and any other effective measures may be used. Where applicable and unless otherwise permitted where an alternate procedure would be acceptable to the State and the Design-Builder, before water shall be allowed to run into any ditch or channel, the waterway shall be prepared with permanent erosion control measures so that the waterway will be safe against erosion. Prior to beginning the work, the Design-Builder shall submit a schedule of operations indicating the special precautions proposed to control erosion.

Special precautions shall be taken in the use of construction equipment to minimize erosion. Wheel tracks shall not be left where erosion might begin. Wherever crossing of live streams is necessary, temporary culverts or bridges shall be constructed to allow equipment to cross. Fording of streams shall not be permitted unless approved by the Department and appropriate permits have been obtained. Disturbance of lands and waters that are outside the limits of the construction as staked will be prohibited except as may be found necessary and ordered.

All waterways shall be cleared as soon as practicable of falsework, piling, debris, or other obstructions placed during construction operations and not a part of the finished Project.

Prior to suspension of construction operations for appreciable lengths of time, the Design-Builder shall shape the earthwork in a manner that will permit storm runoff with a minimum of erosion. Temporary erosion and sediment control measures such as berms, dikes, slope drains, or sedimentation basins shall be provided and maintained until permanent drainage facilities and erosion control features have been completed and are operative.

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The Design-Builder's attention is called to RSA 482-A:3 **Excavating and Dredging Permit; Certain Exemptions** which reads in part:

"482-A:3 Excavating and Dredging Permit; Certain Exemptions. I. (a) No person shall excavate, remove, fill, dredge or construct any structures in or on any bank, flat, marsh, or swamp in and adjacent to any waters of the state without a permit from the department. The permit application together with a detailed plan and a map showing the exact location of the proposed project, along with 4 copies of the permit application, plan and map, shall be submitted to the town or city clerk, accompanied by a filing fee in the form of a check made out by the applicant to the state of New Hampshire.

(b) The permit application fee for minor and major shoreline structure projects shall be \$200 plus an impact fee, based on the area of dredge, fill, or dock surface area proposed, or a combination. The shoreline structure impact fee shall be \$2 per square foot for permanent dock surface area; \$1 per square foot for seasonal dock surface area; and \$.20 per square foot for dredge or fill surface area or both. For projects involving only the repair, reconstruction, or reconfiguration of an existing docking structure, the application fee shall be \$200....."

and RSA 485-A:17 **Terrain Alteration** which reads in part:

"485-A:17 Terrain Alteration. I. Any person proposing to dredge, excavate, place fill, mine, transport forest products or undertake construction in or on the border of the surface waters of the state, and any person proposing to significantly alter the characteristics of the terrain, in such a manner as to impede the natural runoff or create an unnatural runoff, shall be directly responsible to submit to the department detailed plans concerning such proposal and any additional relevant information requested by the department, at least 30 days prior to undertaking any such activity. ..."

In order to prevent the dissemination of harmful or destructive plants or insects, no person shall collect, transport, sell, distribute, propagate, transplant or release any living and viable portion of any plant or any insect species listed in Table 3800.1 of Part AGR 3802 of the New Hampshire Code of Administrative Rules (Statutory Authority RSA 430:55).

Complete information may be secured from the NH Department of Agriculture, Markets & Food Division of Plant Industry.

The Design-Builder shall also protect the atmosphere from particulate and gaseous pollutants in conformance with rules promulgated by the New Hampshire Department of Environmental Services, Air Resources Division.

The Design-Builder's attention is called to Part Env-A 1000 Prevention, Abatement and Control of Open Source Air Pollution; which reads in part:

Env-A 1001.04 General Open Burning Requirements. Open burning in any part of the state shall be permissible when the burning:

- (a) Is conducted in accordance with all local ordinances;
- (b) Is authorized by an official having jurisdiction over open burning, whenever authorization is required;
- (c) Does not create a nuisance; and
- (d) Includes only materials burned in conformance with this part.

The Air Resources Division may order unauthorized burning to cease and may order authorized burning creating a nuisance to cease. The order may be issued directly to the Design-Builder or to the Design-Builder through the Department.

107.02 Permits, Licenses, and Taxes. The Design-Builder shall procure all permits and licenses, pay all charges, fees, and taxes, and give all notices necessary and incidental to the due and lawful prosecution of the Work. The costs for all charges, fees, and taxes shall be included in the unit prices bid for the various items of the Contract. Necessary permits from the proper authorities for the Work as shown on the Plans or indicated in the RFP in coastal and inland waters and wetlands within the State will be obtained by the Design-Builder. It will be

the Design-Builder's responsibility to secure permits, variances, or modifications to the permits secured by the Department for additional work not shown on the Plans or work necessary for the Design-Builder's method of construction. Additional work shall not begin until permits, variances, or modifications have been obtained.

Permit applications for Work within waters of the State are obtainable from the Wetlands Bureau, State of New Hampshire, Department of Environmental Services, 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095, or from their website at www.des.state.nh.us/wetlands. Applications may also be obtained from town and city clerk offices. This permit process may take 60 days or more to complete. Furthermore, if warranted, additional time should be allowed for a public hearing in accordance with RSA 482-A:8.

The Design-Builder is further notified that if the total project impact to wetlands under the jurisdiction of the United States Army Corps of Engineers (USACOE) (work shown on the Plans plus additional work proposed by the Design-Builder) is between 3000 ft² and 3 acres (280 m² and 1.2 ha), the State permitting process is subject to Federal review. The USACOE will notify the applicant within 30 days after issuance of the State permit if a USACOE individual permit is required. If the total project impact to jurisdictional wetlands exceeds 3 acres (1.2 ha), then an USACOE individual permit is required and the application is subject to a Federal public hearing, which may require submission of additional information to the USACOE.

The attention of the Design-Builder is called to RSA Chapter 293-A, Business Corporation Act, which, among other provisions, requires that out-of-state corporations obtain a certificate of authority to do business in the State from the Secretary of State; to RSA Chapter 305-A, Registration of Foreign Partnerships, which, among other provisions, requires that every foreign partnership desiring to do business in this State shall register with and obtain a certificate of authority to do business in the State from the Secretary of State; and to RSA Chapter 349, Trade Names, which, among other provisions requires that every sole proprietor doing business in this State under any other name than their own shall register the trade name of such business, and that every person, proprietorship, partnership, or association, engaged in the conduct of any business, enterprise, venture, or activity within the State under a trade name, firm, or style shall, subject to limitations, file in the office of the Secretary of State a certificate signed and sworn to by such person or proprietorship or by members of such partnership or association stating the name under which the business is to be conducted, the principal place of said business, and a brief description of the kind of business to be carried on, with the names and addresses of the principal parties engaged therein.

The Design-Builder's attention is further called to RSA 72-B, Excavation Tax and related administrative rules of the Department of Revenue Administration, which among other provisions, levies a tax on earth and excavations as defined in RSA 155-E. The Design-Builder is required, on a yearly basis, to file a Notice of Intent to Excavate in each municipality where excavation operations are anticipated. Additionally, the Design-Builder shall post the Excavation Tax Certificate, received from the Department of Revenue Administration, at the Design-Builder's project bulletin board.

Bidders with the word "Engineer" or any form of such word in the name of their business should review RSA 310-A:20, which prohibits the Secretary of State from issuing a certificate of incorporation to any business or registering a foreign business organization with any derivative of the word "Engineer" in its name or which practices Engineering until the business organization obtains a certificate of authorization from the State Board of Licensure for Engineers.

The Design-Builder's attention is further called to RSA 80:7, RSA 80:7a, RSA 80:7b, and RSA 80:7c, which read:

"80:7 Contractors' Taxes. Whenever any person, firm or corporation enters into a Contract or agreement with the state or any political subdivision thereof it shall be a term or condition of such Contract that the state or such political subdivision shall withhold or retain from the Contract price provided for in such Contract such sum or sums as will secure the payment of the taxes levied and assessed against the property of such Contractor or against the property for which such Contractor may be liable for the payment of taxes thereon, until such taxes are paid by such Contractor, or are authorized paid by him from the sums so withheld, provided the collector of taxes or other person responsible for the collection of such taxes notifies the treasurer of the state or political subdivision that such taxes have been assessed but are unpaid. Such notice shall not be given to the treasurer as aforesaid until the expiration of a period of ten days after the collector or other person responsible for the collection of the taxes has presented or sent by first class mail, postage prepaid, addressed to the last known

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address of such Contractor a tax bill, or a duplicate or copy of the tax bill presented or sent to a Subcontractor or lessee for the payment of whose taxes said Contractor is liable together with a notation to said Contractor stating therein a date certain when said collector or other person responsible for the collection of such taxes will notify the treasurer as aforesaid. If the taxes so assessed are not paid by the person, firm or corporation liable therefore by December first of the year of assessment, the treasurer, upon notice from the collector of taxes that the taxes remain unpaid, shall pay over the amounts withheld to the collector and take his receipt therefore which shall be a full and complete discharge of the treasurer from any further liability for the sum so withheld. If on December first the person, firm or corporation is not entitled to sufficient sums under the Contract from which the treasurer can withhold the amount of taxes due, the treasurer as soon thereafter as sufficient sums are available for the purpose shall immediately pay over to the collector the sums so withheld. If the person, firm or corporation shall pay to the collector the taxes for which he or it is liable after notice to withhold by the collector to the treasurer, the collector shall immediately notify the treasurer so withholding, and the sum so withheld shall be paid to the person, firm or corporation, if otherwise due.

80:7-a Subcontractors' Taxes. Whenever a person, firm or corporation enters into a Contract or agreement with the state or any political subdivision thereof and such Contractor employs a Subcontractor to perform any of the work contemplated by such Contract or agreement, it shall be a stated term or condition of such Contract, that said Contractor will be liable for the payment of any taxes assessed in the name of and upon the property of the Subcontractor, used by said Subcontractor in the performance of said subcontract if assessed while said Contract is being performed, to the extent of any sum or sums that may be due from the Contractor to the Subcontractor at the time of or after the Contractor has been notified by the collector of taxes in writing that payment of said taxes has been demanded of said Subcontractor but said Subcontractor has failed, neglected or refused to pay the same. Said Contractor may retain from the Contract price the amount for which he is liable hereunder. The amount of the taxes for which the said Contractor may be liable hereunder may be withheld or retained from the Contract price under the provisions of RSA 80:7.

80:7-b User's Taxes. Whenever a person, firm or corporation enters into a Contract or agreement with the state or any political subdivision thereof and such Contractor has in his possession and uses any taxable property owned by another upon the job to be performed under the Contract or agreement, it shall be a stated term or condition of such Contract that the Contractor having such property in his possession shall be liable for the amount of taxes assessed against such property in the name of the owner of such property while the same is in the possession of such Contractor to the extent of the amount of any sum or sums of money that may be due from said Contractor to the owner of such property for rental or hire thereof at the time of or after the collector of taxes has notified said Contractor in writing that he has made demand upon the owner of such property for payment of the taxes assessed upon said property but that the owner of such property has failed, neglected or refused to pay said taxes. Said Contractor may retain from the sums to be paid for the use of such property the amount for which he is liable hereunder. The amount of the taxes for which the said Contractor may be liable hereunder may be withheld or retained from the Contract price under the provisions of RSA 80:7.

80:7-c Exemption from Attachment. The sums so withheld by the treasurer of the state or any political subdivision thereof upon notice from a collector of taxes under the provisions of RSA 80:7 and the sums so withheld and to be withheld by any Contractor under the provisions of 80:7-a and 80:7-b shall be exempt from attachment, garnishment and trustee process by any person except in an action or suit brought by the collector of taxes to collect such taxes."

107.03 Patented Devices, Materials, and Processes. If the Design-Builder employs any design, device, material, or process covered by letters of patent or copyright, the Design-Builder shall provide for such use by suitable legal agreement with the patentee or owner. The Design-Builder and Contract Surety shall defend and indemnify the Department, any affected third party, or political subdivision from any and all claims for

infringement by reason of the use of any such patented or copyrighted design, device, material, or process, or any trademark or copyright.

The Design-Builder shall indemnify the Department from costs, expenses, and damages that may be obligated for payment by reason of an infringement during the prosecution of the Work or after the completion of the Project.

107.04 Federal Aid Participation. When any Federal laws, rules, or regulations are in conflict with any provisions of a federally assisted Contract, the Federal requirements shall prevail, take precedence, and be in force over and against any such conflicting provisions.

If there is Federal participation in the cost of the Contract, the Work shall be under the supervision of the Department but subject to the inspection and approval of the proper officials of the United States Government. Inspections made by authorized Federal representatives shall not make the United States Government a party to the Contract and will not interfere with the rights of the Contract parties.

107.05 Sanitary, Health, and Safety Provisions. The rules and regulations of Federal, State, and local health officials shall be observed. No employees of the Design-Builder or Subcontractor(s) shall be required to work in surroundings, or under conditions that are unsanitary, hazardous, or dangerous to their health or safety. Any inspector of the OSHA or other legally responsible agency involved in safety and health administration shall be admitted without delay and without presentation of an inspection warrant to all areas of the Work and Project upon presentation of proper credentials.

The Design-Builder shall provide and maintain in a neat, sanitary condition such accommodations for the use of its employees and Department representatives as may be necessary to comply with the requirements of the State Board of Health, or of other bodies or tribunals having jurisdiction. Except as provided under Section 698, this work shall be subsidiary.

The Federal occupational safety and health standards comprise Part 1910 and Part 1926 respectively of Title 29 of the Code of Federal Regulations and are amended periodically in the Federal Register. In case any revisions in the Code of Federal Regulations are published, such revisions will be deemed to supersede the appropriate Part 1910 and Part 1926, and be effective as of the date set forth in the revised regulation.

The Design-Builder's attention is directed to RSA Chapter 277, Safety and Health of Employees, which among other provisions, states rules regarding elevators and scaffolding at construction sites.

In protecting employees from hazardous or toxic exposure, RSA Chapter 277-A, Toxic Substances In The Workplace, states that the employees have the right to know of possible toxic substances in the workplace, and RSA 277-A:5, in part, states that employers shall inform employees as to possible contact with toxic materials and conduct education and training programs.

107.06 Public Convenience and Safety. Construction shall be conducted in a manner so that obstructions to traffic are minimized. The safety and convenience of the public and the protection of persons and property shall be provided as specified under 104.03. The safety provisions of all laws, rules, codes, and regulations applicable to the class of work being performed shall be followed.

No footways, gutters, sewer inlets, or portions of highways adjoining the highway under construction shall be obstructed more than is necessary. Fire hydrants and water holes for fire protection on or adjacent to the highway shall be kept accessible to the fire apparatus at all times and no obstructions shall be placed within ten feet (three meters) of any such facility. The Design-Builder shall be responsible for proper and timely notification to local residents prior to any interruptions of their access or services. In the event that all or part of the highway is officially closed to traffic during construction, the Design-Builder shall provide and maintain safe and adequate traffic accommodations for residences and businesses along and adjacent to the highway so closed.

Except for work done under items in the Contract, work prescribed herein will not be paid for separately but will be considered as subsidiary.

107.07 Barricades and Warning Signs. The Design-Builder shall provide, erect, and maintain barriers, barricades, lights, signals, signs, and other traffic control devices, and shall take all necessary precautions for the protection of the Work and safety of the public. Highway sections closed to traffic shall be protected by effective

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barriers and barricades. Obstructions shall be illuminated during darkness. Warning signs shall be provided to control and direct traffic.

The Design-Builder shall erect warning signs in advance of operations that may interfere with the use of the road by traffic and where the new work crosses or coincides with an existing road. Warning signs shall be placed according to the Traffic Control Plan and maintained in accordance with the Contract. Signs, barriers, barricades, lights, or other protective devices shall not be dismantled or removed without permission of the Department.

The Design-Builder will be held responsible for all damage to the Work from traffic, pedestrians, animals, or any other cause due to lack of adequate protective devices.

All barricades, warning signs, lights, temporary signals, and other protective devices shall conform with the MUTCD and Section 619.

107.08 Use of Explosives. All laws, ordinances, and regulations, including the rules of the Director of State Police as well as Part 1926 - Safety and Health Regulations for Construction (OSHA) of Title 29 of the Code of Federal Regulations and the appropriate parts of Title 30, whichever is the most restrictive, shall be followed in the use, handling, loading, transporting, and storing of explosives and blasting agents.

The Design-Builder's attention is called to RSA Chapter 158, which gives the Director of the Division of State Police the authority to regulate the sale, storage, handling, transportation, inspection, administration, and use of explosives or explosive substances.

Explosives used in the prosecution of the Work shall not endanger life, property, or new work. The Design-Builder shall be liable for all property damage, injury, or death resulting from the use of explosives.

The Design-Builder shall notify each property owner and public utility company having structures or facilities close to the Work of any intention to use explosives. The notice shall be given sufficiently in advance to enable the owners to protect their property.

All explosives shall be stored in a secure manner. All storage places shall be clearly marked. Explosives shall be stored in a magazine which shall be located in respect to buildings, railways, and highways in a manner as required by the Director of State Police.

Explosives shall be used only during daylight hours, shall be handled only by competent workers, and particular care shall be taken to ensure that no unexploded charges remain in the Work.

All persons within the danger zone of blasting operations as determined by the blasting Contractor (per 203.3.2.5.12) shall be warned and no blasting shall be done until the zone has been cleared. Sufficient flaggers shall be stationed outside the danger zone to stop all approaching traffic during blasting operations.

The Design-Builder's attention is called to 106.14 for warranty responsibilities after Final Acceptance.

107.09 Protection and Restoration of Property and Landscape. Public and private property shall be preserved in the prosecution of the Work. Land monuments and property markers shall not be moved, disturbed, or damaged until the Department has witnessed or referenced their location.

The Design-Builder is responsible for damage to public and private property resulting from any act, omission, neglect, misconduct in the Design-Builder's method of executing the work, defective work or materials, or failure to perform the Contract. This responsibility shall not be released until Completion and Acceptance.

Damaged property shall be restored to a condition similar or equal to that existing before the damage or injury occurred. The repairing, restoring, rebuilding, or making good of such damage or injury shall be at the Design-Builder's expense.

If the Design-Builder fails to repair, restore, rebuild, or make good such damage or injury, the Department, after 48 hours notice, may proceed to do so, and the cost thereof will be deducted from any money due or which may become due the Design-Builder under the Contract.

107.09.1 Cultural Resources. When construction operations encounter possible historic or potential Native American artifacts of archeological significance, operations shall be immediately suspended in the area and the Department notified. The Design-Builder will contact the Department's Cultural Resource Manager (603-271-3226) and the State archaeologist who with the Project Manager will determine the disposition of the site. It may be necessary for others to conduct investigations to determine the extent of importance of the site and to recover the

remains prior to commencement of the project within the defined boundaries of the site. Compensation and time extensions for this work shall be determined in accordance with 104.02.

When construction operations encounter human remains, operations in the immediate area shall be temporarily discontinued and the Design-Builder shall notify the Department who will notify state and local police and the Department's Cultural Resource Manager. The County Medical Examiner will determine whether the remains require a criminal or archaeological investigation. A buffer zone will be defined for the burial sites; no work will be performed within that zone until after removal of the remains by others. The Design-Builder will be directed to continue work in the area when the investigation is completed. Compensation and time extensions for this work shall be determined in accordance with 104.02.

The Design-Builder shall maintain a 25-foot buffer zone around known cemeteries. If the Contract specifies work within this buffer zone or cemetery, contact the NHDOT Cultural Resource Manager two (2) weeks prior to beginning work in that area. The Design-Builder's attention is directed to RSA 227-C:8 a-g, RSA 290, RSA 635, and Federal Regulations 36-CFR-800 dealing with cemeteries and human remains.

107.10 Forest Protection. Work within or adjacent to State or National Forests shall be accomplished under the rules and regulations of the State Fire Marshal, State Forest Fire Control Supervisor, Department of Resources and Economic Development, Department of Fish and Game, National Forest Supervisor, or other authority having jurisdiction governing the protection of forests. Sanitary laws and regulations regarding the performance of work within or adjacent to State or National Forests must be obeyed. The Design-Builder shall keep the project site in an orderly condition, dispose of all refuse, and obtain permits for the construction and maintenance of all construction camps, stores, warehouses, residences, latrines, cesspools, septic tanks, and other structures in accordance with the regulations and instructions issued by the Forest Supervisor.

Forest fires shall be prevented and suppressed. The Design-Builder shall require employees and SubDesign-Builders, both independently and at the request of forest officials, to prevent and suppress and to assist in preventing and suppressing forest fires and to notify a forest official of the location and extent of any fire. The requirements as to burning are as follows:

No open burning shall be done by the Design-Builder without advance written approval from the New Hampshire Department of Environmental Services, Air Resources Division (see 107.01). The Design-Builder shall abide by such rules and directions as are prescribed by the local forest fire warden or the forest ranger of the New Hampshire Department of Resources and Economic Development, Division of Forest and Lands, or both.

107.11 Responsibility for Damage Claims. The Design-Builder shall indemnify, defend, and save-harmless the State; adjoining states, cities, or towns; the railroad where operations will affect railroad property; and all of their officers, agents, and employees from and against any and all claims, liabilities, suits, or penalties arising out of (or which may be claimed to arise out of) acts or omissions of the Design-Builder or Subcontractors in the performance of work covered by the Contract. This responsibility shall survive the termination of the Contract. Notwithstanding the foregoing, nothing herein contained shall be deemed to constitute a waiver of the sovereign immunity of the State, which immunity is hereby reserved by the State.

- A. Liability insurance for damages imposed by law of the kinds and amounts specified herein shall be obtained and maintained by the Design-Builder. The insurance obtained shall cover all operations under the Contract whether performed by the Design-Builder or Subcontractor of any tier and shall be maintained until Acceptance.
- B. Before submittal of the Contract to Governor and Executive Council for approval, certificates of insurance in the standard form employed in the State of New Hampshire by underwriters licensed or approved by the Department of Insurance shall be furnished evidencing the required coverages and conditions. In addition, the underwriters must have a rating of no less than B+ based on the current A.M. Best rating guide. The Design-Builder shall have a continuing duty to provide new certificates of insurance as policies are amended or renewed. The minimum required insurance coverages and conditions are as follows:
 1. Workers' Compensation and employers liability as required by law.

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Limits of Liability: \$100,000 each accident;
\$500,000 disease - policy limit;
\$100,000 disease - each employee.

Deductible, if applicable, to be shown on certificate.

2. Commercial General Liability; Occurrence Form, to include Contractual Liability (see Indemnification Clause), Explosion, Collapse and Underground coverages.
Limits of Liability: \$1,000,000 Each Occurrence Bodily Injury & Property Damage;
\$2,000,000 General Aggregate-Include Per Project Aggregate
Endorsement;
\$2,000,000 Products/Completed Operations Aggregate.

or

Comprehensive General Liability Form; to include Premises/Operations, Independent Contractors, Products/Completed Operations, Personal Injury, Contractual Liability (see Indemnification Clause), Collapse and Underground, Medical Payment coverages (Broad Form Comprehensive GL Endorsement)

\$1,000,000 Combined Single Limit of Liability for Bodily Injury & Property Damage.

Note: If blasting or demolition or both is required by the Contract, the Design-Builder or Subcontractor shall obtain the respective coverage and shall furnish to the Department a Certificate of Insurance evidencing the required coverages prior to commencement of any operations involving blasting or demolition or both.

3. Owner's Protective Liability Coverage for the benefit of the State of New Hampshire Department of Transportation.

Limits of Liability: \$2,000,000 Each Occurrence;
\$3,000,000 Aggregate.

or

\$2,000,000 Bodily Injury & Property Damage per occurrence (1973 form).

4. Comprehensive Automobile Liability covering all motor vehicles including owned, hired, borrowed and non-owned vehicles.

Limits of Liability: \$1,000,000 Combined Single Limit for Bodily Injury & Property Damage.

5. Commercial Umbrella Liability

Limits of Liability: \$1,000,000 Each Occurrence;
\$1,000,000 Aggregate.

6. Railroad Protective Liability if the Contract involves work on, over, under or within 20 feet of the right-of-way of the railroad, on behalf of and payable to the railroad company and, if applicable, to the owner of the railroad corridor specified in the Prosecution of Work. Combined Single Limit of Liability for Bodily Injury and Property Damage.

Limits of Liability: \$2,000,000 per Occurrence;
\$6,000,000 Aggregate

7. General Insurance Conditions

(a) Each policy shall contain a clause prohibiting cancellation or modifications of the policy earlier than 30 days, or 10 days in cases of non-payment of premium, after written notice thereof has been received by the Department.

8. Builder's Risk Insurance: The Design-Builder shall insure the work included in the Contract on an "All Risk" basis, on one hundred percent (100%) completed value basis of all building construction. This coverage shall specifically insure all landscape plantings on a one hundred percent (100%) completed value basis. Coverage need not include work involving parking areas, driveways, roads or bridges. Builder's Risk coverage shall include materials located on-site, in-transit, and at any

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temporary site. The policy by its own terms or by endorsement shall specifically permit partial or beneficiary occupancy prior to completion or acceptance of the entire work. The policies shall be in the names of the State Agency and the Design-Builder. The policies shall provide for the inclusion of the names of all other Contractors, Subcontractors, and others employed on the premises as insureds. The policies shall stipulate that the insurance companies shall have no right of subrogation against any Contractors, Subcontractors or other parties employed on the premises.

9. **Professional Liability Insurance:** The Design-Builder shall provide commercial or comprehensive general professional liability (errors and omissions) insurance including contractual coverage, for all claims of bodily injury, death or property damage, in policy amounts of not less than \$250,000 per occurrence and \$2,000,000 in the aggregate (STATE to be named as an additional insured).
10. Additional types of coverage may be established and required in the RFP. Insurance requirements described above shall be the responsibility of the Design-Builder. The Design-Builder may require Subcontractors to maintain similar coverage.

107.12 No Third Party Beneficiary. It is specifically agreed between the parties executing this Contract that it is not intended by the Contract provisions to make the public or any member thereof a third party beneficiary hereunder, or to authorize anyone not a party to the Contract to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of the Contract. The duties, obligations, and responsibilities of the parties to this Contract with respect to third parties shall remain as imposed by law.

107.13 Personal Liability of Public Officials. The Department's authorized representatives are acting solely as agents and representatives of the Department when carrying out and exercising the power or authority granted to them under the Contract. There shall not be any liability either personally or as employees of the Department. No part of this Contract shall be understood to waive the sovereign immunity of the State.

107.14 No Waiver of Legal Rights. Acceptance will not prevent the Department from correcting any measurement, estimate, or certificate made before or after completion of the Contract. The Department will not be prevented from recovering, from the Design-Builder or Surety or both, overpayments sustained for failure to fulfill the obligations under the Contract. A waiver on the part of the Department of any breach of any part of the Contract shall not be held to be a waiver of any other or subsequent breach.

The Design-Builder is liable to the Department for latent defects, fraud or such gross mistakes as may amount to fraud, or as regards the Department's rights under any warranty or guaranty without prejudice to the terms of the Contract.

107.15 Civil Rights. The Design-Builder shall comply with Federal, State and local laws, rules, and regulations that set forth unlawful employment practices including that of discrimination because of race, religion, color, sex, or national origin, and that define actions required for Affirmative Action and Disadvantaged Business Enterprise programs.

107.16 Assignment Provision. The Design-Builder hereby agrees that it will assign to the State all causes of action that it may acquire under the antitrust laws of New Hampshire and the United States as the result of conspiracies, combinations, or Contracts in restraint of trade which affect the price of goods or services obtained by the State under this Contract if so requested by the State.

107.17 Hazardous Materials. The Design-Builder shall be aware of laws and regulations relating to hazardous materials that may be encountered during construction operations, either within project limits or at material sites off the project. The health and safety of employees, the general public, and the potential for damage to the overall environment is possible if hazardous materials are not recognized, reported, and the appropriate action taken to dispose of, remove from the site, or otherwise contain the possible contaminants.

State laws such as RSA141-E, Asbestos Management and Control, RSA 147-A, Hazardous Waste Management, and RSA 149-M, Solid Waste Management, identify the major areas of concern. Parts Env-Wm 100-

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110, Env-Wm 101-300, 2100-3700, and Env-Wm 3900 of the New Hampshire Code of Administrative Rules identify various contaminants related to hazardous waste, solid waste, and asbestos and their management, respectively.

If any abnormal condition is encountered or exposed that indicates the presence of a hazardous material or toxic waste, construction operations shall be immediately suspended in the area and the Department notified. No further work shall be conducted in the area of the contaminated material until the site has been investigated and the Department has given approval to continue the work in the area. The Design-Builder shall fully cooperate with the Department and perform any remedial work as directed. Work shall continue in other areas of the Project unless otherwise directed.

Exposure to hazardous materials may result from contact with, but not necessarily limited to, such items as drums, barrels, other containers, and waste such as cars, batteries, and building construction debris. Containers leaking unknown chemicals or liquids, abandoned cars leaking petroleum products, batteries leaking acid, construction debris that may include asbestos, or any other source of suspected hazardous material found within excavation areas or stockpiled on land within construction limits shall be referred to the Department of Environmental Services so that a proper identification of the materials may be made and disposal procedures initiated as required.

Disposition of the hazardous material or toxic waste shall be made under the requirements and regulations of the Department of Environmental Services. Work required to dispose of these materials shall be performed under Contract item(s), or Supplemental Agreement; compensation and time adjustment shall be as provided for in 104.02. If the waste material disposal requires special procedures, the Department will make arrangements to dispose of the material.

SECTION 108 -- PROSECUTION AND PROGRESS

108.01 Subletting of Contract. The Design-Builder shall not sublet, sell, transfer, assign, or dispose of any portion of the Contract or Contracts that has not been identified in the Design-Builder's SOQ or Proposal without written consent of the Department. The Design-Builder shall perform work amounting to not less than the percent specified in the RFP, of the Contract Amount. Items designated in the Contract as "specialty items" may be subcontracted and the cost of specialty items performed by subcontract may be deducted from the Contract Amount before computing the amount of work required to be performed by the Design-Builder's own organization. Any subcontracts, or transfer of Contract, shall not relieve the Design-Builder, or its Surety of liability under the Contract and Bonds.

For proposed Subcontractor or lower-tier Subcontractor approval, the Design-Builder shall file all required forms and a copy of the executed subcontract with the Bureau administering the Contract at least five working days prior to the requested subcontract work being started. Retroactive subcontract or lower-tier subcontract agreements will not be allowed.

In accordance with New Hampshire law (RSA 228:4-b), prior to any on-site work being performed on any highway, bridge, or other construction, reconstruction, alteration, or maintenance project funded by the Department, each Design-Builder, Subcontractor, lower-tier Subcontractor, must submit a "Work Certificate" with supporting documentation and obtain approval from the Bureau administering the project.

The Design-Builder shall not knowingly sublet, sell, transfer, assign, or dispose of any portion of the Contract or Contracts with any person or entity which, under any federal or state law or regulation, or by voluntary agreement, is currently debarred or disqualified from bidding for construction Contracts or participating in construction projects in any jurisdiction of the United States, unless after disclosure of such ineligibility, such participation is authorized by appropriate federal and State authorities, including the Department. No payment will be made for work performed by any such Design-Builder.

Transmittal requests (OFC Form 15) shall indicate either subcontract work or lower-tier subcontract work and shall include a copy of the subcontract agreement attached to a certification that all required Contract provisions, notices and report forms are a part of each subcontract.

If, during the course of the Work, a Subcontractor or lower-tier Subcontractor fails to complete or perform satisfactory work, the Design-Builder shall complete the Work itself or with another approved Subcontractor. The Design-Builder shall not substitute another Subcontractor for an approved Subcontractor except for reasons acceptable to the Department, nor shall an approved Subcontractor be allowed to perform work not prescribed in the executed agreement on file without prior consent by the Department.

No payment will be made for work performed by any Subcontractor, lower-tier Subcontractor, or Independent Contractor performing work without consent by the Department. Consent will be contingent upon submittal of all required forms including a "Work Certificate". Any Subcontractor, lower-tier Subcontractor, or Independent Design-Builder that fails to comply with this requirement may be reported to the New Hampshire Department of Labor for review under RSA 228:4-b.

108.02 Notice to Proceed. The Design-Builder shall not commence Work on the Project until Contract bonds have been filed, the Contract has been signed on the part of the State, and the Department has given the Design-Builder written notice to proceed. The Notice to Proceed will stipulate the date on which it is expected the Design-Builder will begin the Work and the date from which Contract Time will be charged.

108.03 Pre-Construction Activities.

Prior to commencement of any major construction on the Project, a pre-construction conference shall be held to review the proposed project schedule and coordinate the Work of the Design-Builder, utilities, and Subcontractors. The Design-Builder shall be prepared to discuss in detail the proposed schedule; the Storm Water Pollution Prevention Plan (SWPPP), and the Traffic Control Plan particularly as these relate to coordination with schedules of the utilities and Subcontractors. In addition, the Design-Builder shall be prepared to provide details on the sources and delivery of materials.

If required the Design-Builder shall submit a written SWPPP and to the Department for approval in accordance with 105.02.

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The Design-Builder shall transmit a Progress Schedule and Traffic Control Plan to the Department for documentation in accordance with 105.02; the Department reserves the right to return the Progress Schedule for revision based on the form, compliance with the Contract and good scheduling practice. No construction shall proceed on the project, other than mobilizing, installation of the permanent construction signs, and installing the field office, until the Progress schedule has been submitted and accepted for documentation.

The Progress Schedule submission shall include at a minimum a paper copy and an electronic file. The New Hampshire Department of Transportation has adopted Microsoft Project Scheduler as the official Department scheduling software. All electronic submissions shall be compatible with MS Project.

A. Scheduling of Work

A.1 General Duty of Design-Builder. The Design-Builder is solely responsible for the planning and execution of Work in order to complete the Work within the Contract Time.

A.1.1 Initial Schedule. Within five (5) Days of Notice to Proceed, the Design-Builder shall provide the Department with its Initial Schedule for the first sixty (60) Days of work plus a summary level bar chart schedule for the balance of the project with milestones and completion dates no later than the Contract Completion Date. For contracts in excess of \$40 million, the Initial Schedule will cover at least the first ninety (90) Days of the project. At a minimum, the Initial Schedule must show the major initial Work activities that will affect completion dates including but not limited to planning, design, submittals, procurement, utility adjustments, mobilization, construction staging and phasing, and Department reviews. Any restrictions that affect the Schedule of Work such as paving restrictions or In-Stream Work windows must be charted with the related activities to demonstrate that the Schedule of Work complies with the Contract.

The Department will review the Initial Schedule and provide comments to the Design-Builder within five (5) Days of receipt of the schedule. The Design-Builder will make the requested changes to the schedule and issue the finalized version to the Department.

A.1.2 Schedule of Work Required. Within sixty (60) Days after Notice to Proceed and before beginning any on-site construction activities, the Design-Builder shall submit a Critical Path Method (CPM) Schedule of Work depicting the detailed work plan for the entire Contract Time. The Design-Builder shall plan the Work, including the activity of Subcontractors, vendors, and suppliers, such that all Work will be performed in Substantial Conformity with its Schedule of Work. The Schedule must include sufficient time for the Department to perform its functions as indicated in this Contract.

At a minimum, the Schedule of Work shall show the major Work activities, milestones, durations, and a timeline. Milestones to be included in the schedule include:

- A. Commencement of Work, including design activities, particularly release for construction packages;
- B. beginning and ending of planned Work suspensions;
- C. completion of major Work phases;
- D. Substantial Completion;
- E. Completion of Physical work; and
- F. Completion.

The Schedule of Work must incorporate required utility Work to coordinate with utility owners having facilities within the project limits.

Any restrictions that affect the Schedule of Work such as paving restrictions or In-Stream Work windows must be charted with the related activities to demonstrate that the Schedule of Work complies with the Contract.

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The Design-Builder shall include a written narrative detailing any assumptions made in preparing the schedule including constraints, equipment requirements, production rates to support activity durations, activities requiring overtime, additional shifts, permits, coordination requirements, long lead delivery items, or other significant requirements which would affect the ability to meet the interim and final milestone dates. Failure to include any Work activity will not relieve the Design-Builder from completing all Work within the Contract Time, notwithstanding the acceptance of the schedule by the Department.

The Department will review the Schedule of Work and provide comments to the Design-Builder within ten (10) Days of receipt of the schedule. The Design-Builder will make the requested changes to the schedule within five (5) Days and issue the finalized version to the Department.

If the Design-Builder Plans to Complete the Work before the specified Completion date, the Schedule of Work shall so indicate.

A.1.3 Projected Payment Schedule. Within five (5) Days after approval of the Payout, the Design-Builder shall also provide the Department with a Projected Payment Schedule that estimates the value of the Work as scheduled, including requests for payment of Delivered Materials. The Projected Payment Schedule must be in accordance with the Design-Builder's Schedule of Work and price. The Design-Builder shall revise the Projected Payment Schedule to reflect the actual progress of the Work.

A.1.4 Schedule Updates and Revisions. On a monthly basis or at such intervals as agreed upon, the Design-Builder will submit a schedule update to the Department reflecting the actual progress of the Work including any changes in the Work, Contract Time, or both. The progress of the Work shall be compared against the Schedule of Work at each Progress Meeting. If the Department determines that the Design-Builder's actual progress is not in Substantial Conformity with the Schedule of Work, then the Design-Builder shall either increase Project resources to get back on schedule or submit a revised Schedule of Work and Projected Payment Schedule to the Department. Any schedule revisions must be approved by the Department.

A.1.5 Failure to Submit Schedules. The Department may withhold approval of progress payments until the contractor submits and the Department accepts the initial schedule, the Schedule of Work, and schedule updates.

B. Storm Water Pollution Prevention Plan (SWPPP). The SWPPP shall detail the methods planned for accomplishment of temporary and permanent erosion control work for operations including, but not limited to, clearing, grubbing, grading, drainage, and bridge operations, especially in or adjacent to existing waters, water courses, or wetlands. The SWPPP shall include proposed methods of erosion control for haul roads, borrow pits, and disposal areas.

C. Traffic Control Plan. The traffic control plan shall include the Design-Builder's detailed plan for controlling traffic through the Project and shall be in conformance with the MUTCD and other applicable standards. This plan shall include specific design details on lane closures, detours, and temporary bridges. The plan shall also include the layout of signing, barricades, and other warning devices, as well as the placement of flaggers and uniformed officers. Changes to the traffic control plan shall be transmitted to the Department for review at least fifteen working days in advance of implementation of the change.

108.04 Limitation of Operations. Construction operations shall be conducted to ensure the least interference with traffic, with due regard to the location of detours and to the provisions for handling traffic. The Department may require the Design-Builder to finish a portion of the Project before work is started on any additional portions of the Project if the opening of such portion is essential to public needs.

No work shall be performed on Sundays or legal holidays as defined in Section 101 or without the written permission of the Department except in cases of emergency. Whenever a holiday is observed on a Friday or a Monday, the Design-Builder may be required to suspend work for three days. Prior to the close of work, the Project shall be placed in the best condition possible for the comfort and safety of the traveling public, and definite arrangements shall be made for responsible personnel to maintain the Project in the above condition throughout the period of time when work is not being performed. No work will be permitted at night unless sufficient lighting is

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provided to ensure a comparable degree of accuracy, workmanship, and conditions regarding safety as would be obtained in daylight.

108.05 Character of Workers. The Design-Builder shall employ sufficient resources for prosecuting all classes of work in the manner and time required by the Contract.

Workers shall have sufficient skill and experience to properly perform their assigned work. Workers engaged in work requiring special skills shall be sufficiently knowledgeable and experienced in the work and in the operation of the equipment required to perform the work satisfactorily.

Any person employed by the Design-Builder or by any Subcontractor who, in the opinion of the Department, does not perform the Work in a proper and skillful manner or is intemperate or disorderly shall, at the written request of the Department, be removed from the Work, and shall not be employed again in any portion of the Work without the approval of the Department.

Should the Design-Builder or Subcontractor fail to remove the person or persons or fail to furnish suitable and sufficient personnel for the proper prosecution of the Work, the Work may be suspended by written notice until the Department's orders are followed. The Design-Builder is not entitled to a time extension or compensation for delays or costs incurred as a result of such a suspension. If the person removed is part of the Key Personnel identified in the RFQ, approval of the substitute by the Department is required. If the Department rejects the substitute, the Design-Builder shall submit the name and qualifications of a second substitute within five (5) Days. Such process shall be repeated until a proposed replacement meets the Department's approval.

108.06 Methods and Equipment. All equipment used on the Project shall be of sufficient size and mechanical condition to meet the requirements of the Design-Builder's Schedule of Work and to produce work of satisfactory quality. Equipment used shall not cause injury to the roadway, adjacent property, or other highways.

If equipment is not maintained in full working order or, as used by the Design-Builder, proves inadequate to obtain the results prescribed by the Contract, the Department may order said equipment to be improved or other equipment substituted or added.

When the methods and equipment to be used by the Design-Builder in accomplishing the construction are not prescribed in the Contract, the Design-Builder is free to use any methods or equipment that will accomplish the Work that meets the Contract requirements.

Where practicable, spray applications of materials containing fertilizer, asphalt, and other injurious substances which cause pitting or which impair the reflective and brightness values of metal shall precede the installation of susceptible roadside structures such as signs, sign supports, and guardrail; otherwise, coverings shall be used to protect such structures installed prior to the spray applications.

Failure on the part of the Design-Builder to observe the necessary precautions to prevent damage to property or injury to persons shall be sufficient grounds for suspension of the Work. The Design-Builder is not entitled to a time extension or compensation for such suspensions.

108.07 Determination of Contract Time Extension for Excusable, Nonexcusable, Noncompensable, and Compensable Delays.

A. General. The number of days allowed for completion of the Work or the completion date will be stated in the Project Requirements in the RFP. It is an essential part of the Contract that the Design-Builder performs fully, entirely, and in an acceptable manner, the Work under the Contract within the Contract Time. It is likewise essential that those parts, phases, or stages, as stipulated in the Contract, for the purpose of benefiting the traveling public or for the coordination of work performed by others, shall be completed by the date indicated. An extension of the Contract Time may be granted by the Department for conditions that prevent the Design-Builder from effective prosecution of the critical activity which at that time control the progress of the work as specified in 108.07.B or 108.07.C. Strict adherence to the provisions of this section is necessary for the Department's consideration of an extension to the Contract Time.

The Department will not evaluate a request for extension of the Contract Time unless the Design-Builder notifies the Department as specified in 104.02.G, provides the required analysis as specified in 108.03.A.1.4, and further provides the documentation to the Contract Administrator as specified in 108.07.G. It is the intention of the Department to act to mitigate or grant time extensions for delays before the delay is actually experienced by the

project. For this reason, the Design-Builder shall provide proper notice of a delay per 104.02.G when it is first recognized, not at its conclusion. The Design-Builder's contention that it did not know the actual duration of the delay is not a valid excuse for failing to comply with the notice requirements of 104.02.G. However, if the Design-Builder requests in writing and the Department agrees, the Department may extend the deadlines set forth in 104.02.G.

The Department will evaluate the Design-Builder's analysis and determine the time extension due, if any.

The Design-Builder's plea that insufficient time was specified is not a valid reason for an extension of time. When the Contract sets forth a calendar completion date, due consideration will have been given to the Saturdays, Sundays, legal holidays, and the period between December 1 and April 1 inclusive in the anticipated period of construction. No extension of the Contract completion date will be allowed due to such days. When the Contract stipulates a completion date that falls on a Saturday, Sunday, or legal holiday, or when the time as extended by the Department falls on a date that is a Saturday, Sunday, or legal holiday, the Contract Time will be extended to the next working day.

The extended Completion Date shall have the same standing and effect as though it was the original Completion Date.

If the Design-Builder contends that an excusable delay is also compensable, as specified in 108.07.C, the Design-Builder shall submit a detailed cost analysis of the requested additional compensation prepared in accordance with 109.04 along with the request for the extension of the Completion Date.

In the event that the Department extends the Contract Time into a period of the year during which the working conditions are less favorable, consideration will be given to further extension of time as influenced by the nature of the work involved.

If the Contract Time or phase of work as established in the Contract is based on working days, the Department will furnish a weekly statement showing the number of working days charged for the preceding week and the number of working days remaining for completion of the Contract. The Design-Builder will be allowed 5 working days after the Department issues the weekly statement to file a written protest setting forth the reasons the Department's weekly statement is incorrect, otherwise the statement will be considered accepted by the Design-Builder. Once accepted by the Design-Builder, whether explicitly or as a result of the Design-Builder's failure to file a timely protest the weekly statement is final and the Design-Builder waives entitlement to a time extension or compensation for any delays not explicitly identified by the weekly statement.

B. Excusable, Noncompensable Delay. Excusable, non-compensable delays are delays that are not the Design-Builder's or the Department's fault or responsibility. The Design-Builder is not entitled to compensation for excusable, non-compensable delays.

The following are excusable, non-compensable delays:

1. Delays due to floods, tornadoes, lightning strikes, earthquakes, or other natural disasters.
2. Delays due to unfavorable weather or ground conditions on days, other than the days from December 1 through April 1, determined as follows: for each day on which weather or ground conditions prevent the Design-Builder from effective prosecution of the critical activity that at that time controls the progress of the construction, an extension of one working day will be added to the Contract Time. The Department will not consider weekends and holidays as lost work days unless the Department directs the Design-Builder to work those days.
3. Extraordinary delays in material deliveries the Design-Builder or its suppliers cannot foresee or avoid resulting from freight embargoes, government acts, or nation-wide material shortages. When an extension of the Contract Time is requested due to delays in the delivery of critical materials, sufficient documentary evidence must be furnished to the Department at the time the delay occurs showing that such delay results from the materials being unavailable by reason of an unusual market condition such as an industry-wide strike, natural disaster, or area-wide shortage which arises after the Proposal was submitted and which prevents the timely procurement of materials. The Design-Builder is not due a time extension for delays due to slow delivery from a source of supply when the required material is available elsewhere. Delays due to the Design-Builder's, Subcontractor's, or supplier's insolvency or mismanagement are not excusable.
4. Delays due to the failure of the Department to provide right-of-way in accordance with the Contract.

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5. Delays due to civil disturbances or acts of the public enemy.
6. Delays due to fires.
7. Delays due to epidemics or quarantine restrictions.
8. Delays from labor strikes that are beyond the control of the Design-Builder's, Subcontractor's, or suppliers and are not caused by improper acts or omissions of the Design-Builder, Subcontractor, or supplier.
9. Delays due to Extra Work.

The Design-Builder shall submit a request for time extension based on the delay to the critical path of the Progress schedule accepted for documentation caused by the Extra Work. The Design-Builder's request must consider not only the work added, but also the work deleted in its analysis.

10. Delays due to utility or Railroad relocations or any other Railroad coordination delays.
11. Delays due to an emergency episode procedure carried out under the direction of the New Hampshire Department of Environmental Services, Division of Air Resources.
12. All other delays not the Design-Builder's or Department's fault or responsibility and not reasonably foreseeable or avoidable by the Design-Builder.

C. Excusable, Compensable Delay. Excusable, compensable delays are delays that are not the Design-Builder's fault or responsibility but are the Department's fault or responsibility. For the following excusable, compensable delays, the Department will extend the Contract Time if the conditions specified in 108.07.A are met:

1. Delays due to revised Work as specified in 104.02.
2. Delays due to a Department-ordered suspension.
3. Delays due to acts of the government or a political subdivision other than the Department; however, these compensable delay costs are limited to escalated labor and material costs only, as allowed in 109.04.
4. Delays due to the neglect of the Department or its failure to act in a timely manner.

Compensation for excusable, compensable delays will be determined by the Department according to 109.04.

D. Non-Excusable Delays. Non-excusable delays are delays that are the Design-Builder's fault or responsibility or delays that the Design-Builder could have reasonably anticipated. Delays due to the Design-Builder's, Subcontractor's, or supplier's insolvency or mismanagement are not excusable. The Design-Builder is not entitled to a time extension or compensation for a non-excusable delay.

E. Concurrent Delays. Concurrent delays are separate delays to critical activities occurring at the same time. When a non-excusable delay is concurrent with an excusable delay, the Design-Builder is not entitled to a time extension for the period the non-excusable delay is concurrent with the excusable delay. When a non-compensable delay is concurrent with a compensable delay, the Design-Builder is entitled to a time extension but not entitled to compensation for the period the non-compensable delay is concurrent with the compensable delay.

F. Notification of Delay. In addition to the notice requirements of 104.02.G, the Design-Builder shall provide the following detailed information when giving notice of a delay:

- a) A detailed description of the events causing delay.
- b) The identification of the party(ies) responsible for the delay and the Contractual basis for this determination.
- c) Activities in the current Progress schedule affected by the delay.
- d) The magnitude of the delay, whether known or forecast, using the current Progress Schedule update as a basis for this determination.

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G. Record Keeping. After notifying the Contract Administrator of the delay, Design-Builder shall keep daily records of the labor, material, and equipment affected by the delay as specified in 109.04. The Design-Builder shall maintain a daily record of each operation affected by the delay and the station location(s) of the operations affected. Daily records of the operations and stations will also be maintained by the Department. Each Monday, or at a time agreed to by the Design-Builder and the Department, the Design-Builder shall compare the previous week's daily records with the records kept by the Department. The Design-Builder shall also prepare and submit written reports to the Contract Administrator containing the following information each Monday:

1. Number of days behind schedule.
2. A summary of all operations that have been delayed, or will be delayed.
3. In the case of a compensable delay, the Design-Builder shall explain how the Department's act or omission delayed each operation, and estimate the amount of time required to complete the Project.
4. Itemize all extra costs being incurred, including:
 - a. How the extra costs relate to the delay and how they are being calculated and measured;
 - b. The identification of all non-salaried Project employees for whom costs are being compiled; and
 - c. A summary of time charges for equipment, identified by manufacturer's number for which costs are being compiled.

Provide written notice to the Department within ten days of the results of the comparison of the detailed reports performed each Monday and define any disagreements between specific records.

Failure to meet to review the Department's records or to report disagreements between the records shall establish that that the Department's records are accurate and that the Design-Builder agrees that the Department's records will be the basis for determining the delay and any compensation that may be due as a result of the delay. The Design-Builder waives entitlement to a time extension or compensation for delay incurred prior to notifying the Contract Administrator that operations have been delayed. Delay costs allegedly incurred prior to notifying the Contract Administrator that operations have been delayed will not be allowed.

108.08 Blank.

108.09 Failure to Complete on Time. For each calendar day or work day that work remains uncompleted after the Contract Time, the sum specified below will be deducted from any money due the Design-Builder. This sum shall not be considered and treated as a penalty but as liquidated damages due the Department by reason of inconvenience to the public, added cost of Engineering and supervision, and other extra expenditures of public funds due to the Design-Builder's failure to complete the Work on time. Any adjustment of the Contract Time for completion of the Work granted under the provisions of 108.07 will be considered in the assessment of liquidated damages.

In the case of a date in the Contract being given for the completion of parts, phases, or stages, the liquidated damages will be deducted for the period during which that particular work remains incomplete.

Permission for the Design-Builder or Surety to continue and finish work after the Contract Time and approved time extensions have elapsed shall not waive the Department's rights under the Contract.

The assessment of all or any of the liquidated damages that accrue may be terminated if the Department has determined that the Work is substantially complete and is in a condition for safe and convenient use by the traveling public.

The Work will be considered substantially complete when all necessary signing, striping, guardrail, and other safety appurtenances have been installed, and when applicable opened to the traveling public. For projects that will not be opened to the traveling public, the Contract will be considered substantially complete when it is ready for the subsequent project. This shall not be construed as a Contractual right and its application will be contingent upon the Design-Builder's diligence in completing the remaining items of work.

Liquidated damages shall be assessed in accordance with the following schedule:

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<u>Original Contract Amount</u>		<u>Daily Charge</u>	
From more than	To and including	Calendar Day	Working Day
\$ 0	\$ 100,000	\$ 390	\$ 590
100,000	750,000	590	880
750,000	2,000,000	780	1,170
2,000,000	5,000,000	1,170	1,760
5,000,000	10,000,000	1,560	2,340
10,000,000	20,000,000	1,950	2,930
20,000,000	----	2,350	3,520

When the Contract Time is on a calendar date basis, the schedule for calendar date shall be used. When the Contract time is on a working day basis, the schedule for working days shall be used.

When Acceptance has been made by the Department as prescribed in 105.17, the daily charge will no longer be assessed.

Should the amount of money otherwise due the Design-Builder be less than the amount of such liquidated damages, the Design-Builder and the Surety shall be liable to the State for such deficiency.

The Department has the right to deduct the amount of anticipated liquidated damages against the Design-Builder from any estimated payment for Work performed under the Contract; or to claim and recover such sums by process of law. Review of anticipated Contract completion and potential liquidated damages will commence when 80% of the original Contract Time has elapsed.

108.10 Default of Contract. The Department may declare the Contract in default to the Design-Builder and the Surety advising them of the actions required for remedy if the Design-Builder:

- A. Fails to begin the Work under the Contract within the time specified in the Notice to Proceed, or
- B. Fails to perform the Work with sufficient resources to ensure the timely completion of the work, or
- C. Fails to perform the Work in accordance with the Contract requirements or neglects or refuses to remove and replace rejected materials or unacceptable work, or
- D. Discontinues the prosecution of the Work, or
- E. Fails to resume work which has been discontinued within a reasonable time after notice to do so, or
- F. Becomes insolvent, is declared bankrupt, or commits any act of bankruptcy or insolvency, allows any final judgment to remain unsatisfied for a period of ten days, makes an assignment for the benefit of creditors, or
- G. Fails to comply with Contract requirements regarding minimum wage payments or EEO requirements, or
- H. Is a party to fraud.

The Department will give notice in writing to the Design-Builder and the Surety of such delay, neglect, or default.

If the Design-Builder or Surety does not proceed in accordance with the notice within ten days of receipt, the Department has full power and authority, without violating the Contract, to take the prosecution of the Work from the Design-Builder. The Design-Builder shall immediately deliver to the Department all design documents of whatever nature and all other completed or partially completed drawings (including plans, elevations, sections, details and diagrams), specifications, records, information, schedules, samples, shop drawings, electronic files and other documents and facilities related to the Project that the Department deems necessary for completion of the Work. The Department shall have the unequivocal right to use said documents to complete the Work and may enter into an agreement with another entity for the Completion of the Work, or use such other methods as in the opinion of the Department are required for the Completion of the intent of the Contract in an acceptable and timely manner. Acceptable materials obtained by the Design-Builder for use on the Project and not yet included in the Work, may be purchased by the Department from the Design-Builder at invoiced costs.

The methods used for completion of the Contract will be determined by the Department.

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All costs and charges incurred by the Department, as a result of the delay, neglect, or default, including the cost of completing the Work under Contract, and any applicable liquidated damages or disincentives will be deducted from money due the Design-Builder for completed work. If such costs exceed the sum that would have been payable under the Contract, the Design-Builder and Surety shall be liable and shall pay the Department the balance of such costs in excess of the Contract Amount.

If it is determined, after termination of the Design-Builder's right to proceed, that the Design-Builder was not in default, the rights and obligations of the parties will be the same as if the termination had been issued for the convenience of the Department under 108.11. Thus, damages to which a Design-Builder may be entitled as a result of the improper default termination will be limited to appropriate amounts for the items listed in 108.11.

If the Design-Builder files for bankruptcy at any time before expiration of the warranty periods provided by this Contract, then the Design-Builder and its Surety agree, if requested by the Department and within thirty (30) Days of such request, to take all actions necessary or convenient to reject or accept this Contract under the executory Contract provisions of the federal bankruptcy code.

108.11 Termination of Contract for the Convenience of the Department. The Department may, with the concurrence of the Governor and Executive Council, and with the approval of the FHWA where applicable, terminate the entire Contract or any portion thereof, if the Department determines that a termination is in the Department's interest. The Department will deliver to the Design-Builder a Notice of Termination specifying the extent of termination and the effective date.

- A. Submittals and Procedures. After receipt of a Notice of Termination, the Design-Builder shall immediately proceed with the following obligations:
 1. Stop Work as specified in the notice.
 2. Place no further subcontracts or orders or materials, services, or facilities, except as necessary to complete the continued portion of the Contract.
 3. Terminate all subcontracts to the extent they relate to the Work terminated.
 4. Settle all outstanding liabilities and termination settlement Proposals arising from the termination of purpose of this clause.
 5. Transfer title and deliver to the Department (1) the fabricated, partially fabricated, or unfabricated parts, Work in process, completed Work, supplies, and other material produced or acquired for the Work terminated, and (2) the completed or partially completed plans, drawings, information, and other property that, if the Contract had been completed, would be required to be furnished to the Department.
 6. Complete performance of the Work not terminated.
 7. Inventory acceptable Materials obtained by the Design-Builder for the Project that have not been incorporated in the Work in conjunction with the Department at a date identified by the Department.
 8. Take any action necessary, or that the Department may direct, for the protection and preservation of the property related to the Contract that is in the possession of the Design-Builder and in which the Department has or may acquire an interest.
- B. Settlement Provisions. When the Department orders termination of all or a part of the Contract effective on a certain date, Accepted Work as of the date of termination will be paid for at agreed upon prices.
 1. Additional Costs. Within 60 days of the effective termination date, the Design-Builder shall submit a claim for additional damages or costs not covered above or elsewhere in the Contract. Such claim may include such cost items as reasonable idle equipment time, mobilization efforts, bidding and project investigative costs, overhead expenses attributable to the Project terminated, accounting charges involved in claim preparation, Subcontractor costs not otherwise paid for, actual idle labor cost if Work is stopped in advance of termination date, guaranteed payments for private land usage as part of the original Contract, and any other cost or damage for which the Design-Builder feels reimbursement should be made. Anticipated profits will not be considered as part of any settlement.
The Design-Builder and the Department may agree upon the whole or any part of the amount to be paid because of the termination. The settlement amount shall not exceed the total Contract Amount

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reduced by the amount of payments previously made plus payment for Work not terminated. The Contract shall be amended, and the Design-Builder paid the agreed amount.

2. Additional Cost Review. If the Design-Builder and the Department fail to agree on the whole amount to be paid the Design-Builder because of the termination of work, the Department will pay the amounts determined as follows, but without duplication of any amounts agreed upon above:
 - a. For Contract Work performed before the effective date of termination, the total (without duplication of any items) of:
 1. The Department will determine compensation in accordance with 109.04 for Work performed;
 2. The cost of settling and paying termination settlement Proposals under terminated subcontracts that are properly chargeable to the termination portion of the Contract if not included in subparagraph 1 above; and
 3. A sum, as profit on (1) above determined by the Department to be fair and reasonable. The Department shall allow no profit under this subdivision if the Design-Builder's costs incurred on work performed exceed the bid item payments made.
 - b. The reasonable costs of settlement of the work terminated, including:
 1. Accounting, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and support data;
 2. The termination and settlement of subcontracts (excluding the amounts of such settlements); and
 3. Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.
 - c. Except for normal spoilage, and to the extent that the Department expressly accepts the risk of loss, the Department will exclude from the fair value all that is destroyed, lost, stolen, or damaged so as to become undeliverable to the Department or to the buyer.
 - d. In arriving at the amount due the Design-Builder under this clause, there will be deducted -
 1. All unliquidated advance or other payments to the Design-Builder under the terminated portion of the Contract;
 2. Any claim that the Department has against the Design-Builder under the Contract; and
 3. The agreed price for, or proceeds from the sale of Materials, supplies, or other things acquired and sold by the Design-Builder not recovered by or credited to the Department.

If the termination is partial, the Design-Builder may file a proposal with the Department for an adjustment of the price(s) of the continued portion of the Contract. The Department will make any payment agreed upon. Any proposal for compensation under this clause shall be requested within 90 days from the effective date of termination unless extended in writing by the Department.

The Department may, under the terms and conditions it prescribes, make partial payments and payments against costs incurred by the Design-Builder for the terminated portion of the Contract, if these payments will not exceed the amount to which the Design-Builder is entitled.

The Design-Builder shall maintain and make available all project cost records and Proposal Escrow Documentation, if any, to the Department for audit to the extent necessary to determine the validity and amount of each item claimed. This includes all books and other evidence bearing on the Design-Builder's costs and expenses under the Contract. These records and documents shall be made available to the Department at the Design-Builder's office, at all reasonable times, without charge. If approved by the Department, photographs, microphotographs, or other authentic reproductions may be maintained instead of original records and documents.

Termination of the Contract or portion thereof shall not relieve the Design-Builder of Contractual responsibilities for the Work completed, nor shall it relieve the Surety of its obligation for and concerning any just claims arising out of the Work performed.

108.12 Termination of Design-Builder's Responsibility. Whenever the improvement provided for by the Contract shall have been completely performed on the part of the Design-Builder and all parts of the Work have been approved and accepted, the Design-Builder shall then be released from further obligations except as set forth in their bond and as provided in 107.14.

108.13 Understanding of Parties Regarding Department's Performance. It is understood and agreed by the parties to the Contract that all obligations of the Department hereunder, including the continuance of payments, are contingent upon the appropriation and continued availability of State and Federal funds, and in no event shall the Department be liable for any payments hereunder in excess of such appropriated and available funds. In the event the General Court or any of its Committees orders the reduction of expenditures of State funds and the Governor and Council fails to encumber funds or reduces or terminates the expenditure of anticipated funds or appropriations relative to the Contract, the Department may, by written notice to the Design-Builder, immediately terminate the Contract in whole or in part in accordance with the applicable provisions of 108.11.

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SECTION 109 -- MEASUREMENT AND PAYMENT

109.01 Payment.

109.01.1 Lump Sum Price. Unless expressly provided elsewhere in this Contract, payment for all Work within the Scope of Work shall be included in the Lump Sum Price shown on the Price Proposal Form. Compensation for all work not specifically designated in this Contract as a unit price, incentive/disincentive, QC/QA, cost-plus, or allowance item shall be included in the said Lump Sum Price.

109.01.2 Scope of Payment. The Design-Builder shall receive and accept compensation provided for in the Contract as full payment for furnishing all materials; for performing work under the Contract in a complete and acceptable manner; and for all risk, loss, damage, or expense arising out of the nature or prosecution of the work, subject to the provisions of 107.14.

The Design-Builder shall not use publicly-owned equipment on projects financed in whole or in part with federal funds except in exceptional cases where such rental may be clearly in the public interest. Public interest will be indicated to the Design-Builder in one of two ways: (1) when the Special Provisions suggest the possibility of renting specified equipment with the rates and points of availability or delivery of such equipment, or (2) if, during construction, an emergency should develop caused by breakdown or loss of equipment from accidents or other unforeseeable causes beyond the control of the Design-Builder, and the Design-Builder is otherwise unable to secure equipment with which to continue the work. In this emergency, publicly-owned equipment may be made available to the Design-Builder at rental rates agreeable between the Design-Builder and the Department or other public agency that owns the equipment.

109.01.3 Payout Schedule.

109.01.3.1 Submittal. Within fifteen (15) Days of the Notice to Proceed, the Design-Builder shall submit to the Department a Payout Schedule for approval in accordance with 105.02 based on a cost breakdown of the major activities or tasks shown in their Progress Schedule. This schedule shall be a realistic and documentable presentation of the costs to complete the major activities or tasks that comprise the Lump Sum Price for the Work. Applications for Payments should reference, and reflect actual progress on, the activities and tasks on the Payout Schedule. The Department will use the Payout Schedule to assist in evaluating requests for payment.

Within five (5) Days after approval of the Payout Schedule, the Design-Builder shall submit to the Department a Projected Monthly Schedule of Payments for the Project. The Projected Monthly Schedule of Payments will provide the Department with an estimate of monthly cash flow requirements by forecasting the Design-Builder's monthly Applications for Progress Payments for the duration of the Project. A sample form of the Monthly Projected Schedule of Payments is provided as Exhibit A to Appendix A of the RFP.

The Design-Builder shall maintain the Payout Schedule and Projected Monthly Schedule of Payments to reflect changes in their Schedule of Work.

109.01.3.2 Review and Approval. Within five (5) Days of the submittal of the Payout Schedule, the Department shall approve the Payout Schedule or return it to the Design-Builder with deficiencies noted. The Department will not approve a Payout Schedule that is unbalanced. The Design-Builder shall then resubmit the Payout Schedule until an acceptable Payout Schedule is approved. No progress payment, including costs for design services and any initial request of mobilization costs, will be made until a Payout Schedule is approved. The Design-Builder is responsible for incorporating time for submission and approval of the Payout Schedule in its Schedule of Work.

109.01.3.3 Justification of Payout Schedule or Projected Monthly Schedule of Payments. The Department may require the Design-Builder to provide explanations and supporting documentation if the Payout Schedule or Projected Monthly Schedule of Payments indicate unbalancing or do not reasonably reflect the actual cost of performing the work or the value of work received by the Department.

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109.03 Blank.**109.04 Payment for Revisions to the Contract.**

109.04.1 General. If the Department revises the Contract as provided in 104.02, the Department will pay for the revision following the sequence specified in 109.04.3 through 109.04.4. Such payment will include compensation for performing the revised work, delay costs, and all other costs not expressly precluded by 109.04.5. The Department may, at any time, direct the Design-Builder to perform all or part of the revised work in accordance with 109.04.4. Force Account.

If a Contract Revision includes a time extension for compensable delays as provided by 108.07, the Department will pay the costs associated with time extension in accordance with 109.04.6.

109.04.2 Blank.

109.04.3 Negotiated Prices. When determining a negotiated price, the Design-Builder shall first provide an estimate of the proposed unit prices or lump sum price for the Contract Revision to the Department. The Department may request that the Design-Builder justify the estimate by providing one or more of the following:

1. Labor requirements by trade in hours for each task.
2. Equipment costs and time requirements.
3. Material costs.

The Design-Builder shall provide the justification within 5 working days after the Department's request. The Department will respond to the estimate within 5 working days after receipt of the Design-Builder's justification. The Department and the Design-Builder can mutually agree to extend these 5-day requirements.

If the Department and the Design-Builder cannot agree on a negotiated price for the Contract Revision, the Department may direct the Design-Builder to perform all or part of the revised work in accordance with 109.04.4 Force Account.

109.04.4 Force Account.

109.04.4.1 General. When directed to perform work on a force account basis the Department will pay the Design-Builder as specified in 109.04.4.2 through 109.04.4.6, as full compensation for performing the force account work, including delay costs, and all other associated costs. The Department may request the Design-Builder submit a written proposal for the work, including the planned equipment, materials, labor, and work schedule.

The Design-Builder's representative and the Department at the end of each work day shall compare records of the cost of work completed on a Force Account basis. These daily records shall be set forth on the forms provided by the Department and shall thereafter be considered to be the basis for payment of the work performed, but shall not preclude subsequent revision based on a later audit by the Department.

No payments will be made for work performed on a Force Account basis until the Design-Builder has furnished the Department with a statement of the cost of the Force Account work showing the following:

- a. Name of Subcontractor, if appropriate.
- b. Name, classification, date, daily hours, total hours, rate, and extension for each laborer, operator, and foreman.
- c. Quantities of materials, prices, and extensions.
- d. Charges for transportation of materials.
- e. Specialized work charges.
- f. Designation, dates, daily hours, total hours, rental rate, and extension for each unit of equipment or plant.
- g. Cost of property damage liability, and worker's compensation insurance premiums, unemployment insurance contributions, and social security.

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The Design-Builder shall certify that the labor, materials, and equipment listed were actually used on the Force Account Work described, that the labor and equipment were used for the hours indicated, and that the rates for labor do not exceed those for comparable labor currently employed on the project.

Statements shall be accompanied and supported by certified copies of the appropriate payrolls, and invoices for all materials and specialized work and for transportation charges. If materials used on the Force Account work are not specifically purchased for the work but are taken from the Design-Builder's stock, the Department shall be furnished an affidavit certifying that the materials were taken from stock, that the quantity claimed was actually used, and that the price and transportation costs claimed represent the Design-Builder's actual cost.

During the life of the Contract and for a period of not less than three years after the date of Acceptance thereof, the Design-Builder's cost records pertaining to work paid for on a Force Account basis shall be open to inspection or audit by representatives of the Department, and the Design-Builder shall retain such records for that period. Where payment for materials or labor is based on the cost thereof to forces other than the Design-Builder, the Design-Builder shall make every reasonable effort to ensure that the cost records of such other forces will be open to inspection and audit by representatives of the Department on the same terms and conditions as the cost records of the Design-Builder.

Payment for force account work will be determined by the Department as follows:

109.04.4.2 Labor. For all labor, including equipment operators, and foremen in direct charge of the specific operation, the Design-Builder shall receive the rate of wage agreed to in writing for each and every hour that the labor and foreman are actually engaged in the work. In case the Design-Builder is required to pay overtime pay or holiday pay to labor engaged in the Work, such rate will be the rate reimbursed. When the Design-Builder is ordered to return to the project solely to perform Force Account work, labor will be considered as being actually engaged in the Work during the hours while traveling.

No part of the salary or expenses of anyone connected with the Design-Builder's forces above the grade of foreman or having general supervision of the Work will be included in the labor item as specified above.

The Design-Builder will also receive an additional amount (i.e. a labor burden rate) equal to 50 percent of the actual hourly wage rate paid to, or in behalf of workers, for costs of health and welfare benefits, taxes, insurances, retirement, and union benefits. A Design-Builder can request a different labor burden rate be used if an independently audited breakdown of the actual aforementioned costs, prepared by a Certified Public Accountant, is provided. The audit of the burden rate shall be prepared on current financial data and in conformity with the accounting practices prescribed by the Federal Acquisition Regulations 48 CFR, Part 31.

An amount equal to ten percent of the sum of the above items will also be paid the Design-Builder to compensate for all field and home office overhead costs and profit.

Subsistence and travel expenses paid by the Design-Builder will be reimbursed only when the Department orders Force Account Work and, in order to perform such work, it is necessary to move workers to the project particularly for that operation. Such subsistence and travel expenses allowed shall be carried on the daily report form under the classification of "Material," without, however, being subject to the added percentage for materials. If work other than such Force Account Work is performed by the individuals during or in connection with that operation, no subsistence or travel expenses will be allowed.

109.04.4.3 Materials and Specialized Work.

109.04.4.3.1. Materials. The actual cost of materials per itemized invoice approved for use by the Department and incorporated into the work, including transportation charges (exclusive of equipment rentals as hereinafter set forth) will be paid to the Design-Builder, to which cost 15 percent will be added to compensate for field and home office overhead costs and profit.

The cost of materials will be the cost to the purchaser, whether Design-Builder, Subcontractor, or other, from the supplier thereof, except as the following are applicable:

- a. If materials are procured by the purchaser by any method which is not a direct purchase from and a direct billing by the actual supplier to such purchaser, the cost of such materials will be deemed to be the price paid to the actual supplier as determined by the Department. No markup except for actual costs incurred in the handling of such materials will be permitted.

- b. If the materials are obtained from a supply or source owned wholly or in part by the purchaser, payment will not exceed the price paid by the purchaser for similar materials furnished from said source on Contract items or the current wholesale price for such materials delivered to the job site, whichever price is lower.
- c. If, in the opinion of the Department, the cost of such materials is excessive, then the cost of such material will be deemed to be the lowest current wholesale price at which such materials are available in the quantities concerned delivered to the job site.
- d. If the Design-Builder does not furnish satisfactory evidence of the cost of such materials from the actual supplier, the cost will then be determined in accordance with paragraph (c).

109.04.4.3.2 Specialized Work. Work directed by the Department not included in the Contract and not performed by the Design-Builder or Subcontractor, requiring special skills, tools, and equipment unlike those used by the Design-Builder. Payment for such specialized work shall be based on current market prices and industry practice per an itemized invoice. If accepted, the Design-Builder will receive the cost of the invoice to which cost 5 percent will be added to compensate for field and home office overhead costs and profit.

In those instances wherein a Design-Builder is required to perform Extra Work necessitating a fabrication or machining process in a fabrication or machine shop facility away from the job site, the charges for that portion of such work performed in such facility may, by agreement, be accepted as Specialized Work.

109.04.4.4 Equipment and Plant. For any Design-Builder-owned machinery or special equipment (other than small tools), the use of which is approved by the Department, the hourly rate will not exceed that determined from the appropriate edition of the "Rental Rate Blue Book for Construction Equipment" published by Equipment Watch used in the following manner:

- a. The hourly equipment rental rate R will be determined by formula as follows:

$$R = (A \times B \times C) + D$$

Where A = Monthly rate divided by 176. The listed weekly, hourly, and daily rates will not be used.

B = Average regional adjustment factor for New Hampshire.

C = Factor from Rate Adjustment Table for the year of equipment manufacture.

D = Estimated operating costs per hour.

- b. The number of hours to be paid for will be the number of hours that the equipment or plant is actually used on a specific Force Account activity and, in addition, shall include the time required to move the equipment to the location of such Force Account activity and return it to the original location or to another location requiring no more time than that required to return it to its original location, except that moving time will not be paid for if the equipment is used during the move on work other than the specific Force Account activity.
- c. The current revision of the "Blue Book" applicable to the specific Force Account work is as of the beginning of the calendar year in which the Extra Work is being performed. Revised sections published during the year will not be incorporated in the "Blue Book" until the beginning of the next calendar year.
- d. The average regional adjustment factor for this Contract is 0.95.
- e. Overtime shall be charged at the same rate indicated in subparagraph (a) above.
- f. The estimated operating costs per hour will be used for each hour that the equipment or plant is in operation on the Force Account work. Operating costs are not reimbursable for the time the equipment is idle.
- g. The maximum rental period to be paid for per day shall not exceed eight hours unless the equipment operates for eight or more hours.
- h. If equipment is idled solely due to the responsibility of the Department, then the Design-Builder may be compensated for such idle equipment at 50% of the rate defined in "A" above (monthly rate divided by 176).

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- i. The rates established above shall include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs, overhauls, and maintenance of any kind, depreciation, storage, field and home office overhead, profits, insurance, and all incidentals.

The Design-Builder shall provide the Department with the following: the manufacturer's name, equipment type, year of manufacture, model number, type of fuel used, horsepower rating, attachments required, together with their size or capacity, and any further information necessary to ascertain the proper rate. Unless otherwise specified, manufacturer's ratings and manufacturer approved modifications shall be used to classify equipment for the determination of applicable rental rates. Equipment which has no direct power unit shall be powered by a unit of at least the minimum rating recommended by the manufacturer. The Design-Builder shall have available for the Department's use a revised copy of the "Blue Book" as referenced above.

Equipment used by the Design-Builder shall be in good working condition and shall be of suitable size and suitable capacity required for the work to be performed. The rate for the basic equipment with the appropriate attachments shall include only the rate for the combined equipment necessary to perform the Extra Work. In case the Design-Builder elects to use equipment of a higher rental value than that suitable for the work, payment will be made at the rate applicable to the suitable equipment. The equipment actually used and the suitable equipment to be paid for will be recorded as a part of the record for Force Account work. The Department will determine the suitability of the equipment. If there is a differential in the rate of pay of the operator of oversize or higher rate equipment, the rate paid for the operator will likewise be that for the suitable equipment.

Payable time periods will not include: (1) time elapsed while equipment is inoperative due to breakdowns, (2) time spent repairing equipment, or (3) time elapsed 24 hours after the Department has advised the Design-Builder that the equipment is no longer needed.

If a piece of equipment is needed that is not listed in the above stated rental rate guide, a rate will be established by the Department in writing before the equipment is used. The Design-Builder may furnish any cost data which might assist the Department in the establishment of such rate.

If the Design-Builder does not own a specific type of equipment and must obtain it by rental, the Design-Builder shall inform the Contract Administrator of the need to rent the equipment and of the rental rate for that equipment before using it on the work. The Design-Builder will be paid the actual rental for the equipment for the time that the equipment is actually used to accomplish the work, provided that the rate is reasonable, plus the cost of moving the equipment onto and away from the job. The Design-Builder shall provide a copy of the paid receipt or canceled check for the rental expense incurred.

Transportation charges for each piece of equipment, whether owned or rented, moved to and from the site of the work will be paid provided: (1) the equipment is obtained from the nearest approved source, (2) the return charges do not exceed the delivery charges, (3) haul rates do not exceed the established rates of licensed haulers, (4) charges are restricted to those units or equipment not already available and not on or near the Project, and (5) equipment is not used elsewhere on the project.

109.04.4.5 Miscellaneous. No additional allowance will be made for general superintendence, the use of small tools, or for other costs for which no specific allowance is provided.

109.04.4.6 Subcontracting. For administration costs in connection with approved subcontract work, the Design-Builder shall receive an amount equal to five percent of the total cost of work computed as set forth above to compensate for field and home office overhead costs and profit, except that no percentage will be allowed for equipment rented from the Design-Builder.

109.04.4.7 Bond. The Design-Builder will receive the actual costs for bond premium as a percentage of the total cost of the Work computed as set forth above for work paid under items not originally in the Contract. The Design-Builder shall furnish evidence of the rate paid for such bond.

109.04.4.8 Compensation. The compensation herein provided shall be accepted by the Design-Builder as payment in full for Force Account work, including superintendence, subcontracting, taxes, bond, field and home office overhead, profit, and other costs in connection with the Work which are not provided for.

109.04.5 Non-Allowable Charges.

Whether payments for Contract Revisions are based on negotiated unit prices, agreed lump sum prices, negotiated prices, or force account, the Department will not reimburse the Design-Builder for the following:

1. Home office overhead or profit in excess of that specified in 109.04.2 through 109.04.5.
2. Loss of anticipated profit.
3. Consequential damages, including loss of bonding capacity, loss of bidding opportunities, and insolvency.
4. Indirect costs.
5. Attorneys fees, claims preparation expenses, or costs of litigation.
6. Interest.

109.04.6 Compensation for Delay

109.04.6.1 General. For a compensable delay as identified in 108.07.D, the Department will pay for the costs specified in 109.04.6.2. The Department will not pay for non-allowable charges specified in 109.04.5, nor duplicate payment made under 109.04.2 through 109.04.4.

The Department will make no payment for delay costs before the Design-Builder submits an itemized statement of those costs. Provide the following content for the applicable items in this statement.

109.04.6.2 Allowable Delay Costs.

109.04.6.2.1 Extended Field Office Overhead. The Department will pay the Design-Builder for extended field office overhead costs that include costs for general field supervision, field office facilities and supplies, and for maintenance of field operations.

General field supervision labor costs include, but are not limited to, field supervisors, assistants, watchman, clerical, and other field support staff. Compute these labor costs as specified in 109.04.4.2. For salaried personnel, calculate the daily wage rate actually paid by dividing the weekly salary by 5 days per week.

Field office facility and supply costs include, but are not limited to, field office trailers, tool trailers, office equipment rental, temporary toilets, and other incidental facilities and supplies. Compute these costs to provide these services on a calendar-day basis using actual costs incurred due to the delay.

Maintenance of field operations costs include, but are not limited to, telephone, electric, water, and other similar expenses. Compute these costs to maintain these services on a calendar-day basis using actual costs incurred due to the delay.

109.04.6.2.2 Idle Labor. Compute labor costs during delays as specified in 109.04.4.2 for all non-salaried personnel remaining on the project as required under collective bargaining agreements or for other Department-approved reasons.

109.04.6.2.3 Escalated Labor. To receive payment for escalated labor, demonstrate that the Department-caused delay forced the work to be performed during a period when labor costs were higher than planned at the time of bid. Provide adequate support documentation for labor costs, allowances, and benefits.

109.04.6.2.4 Idle Equipment or Equipment Demobilization. The Department will pay the Design-Builder the idle equipment rate calculated in 109.04.4.4 for equipment, other than small tools, that must remain on the project during Department-caused delays. The Department will pay the Design-Builder's transportation costs to remove and return equipment not required on the project during delays.

109.04.6.2.5 Materials Escalation or Material Storage. The Department will pay the Design-Builder for increased material costs or material storage costs due to the Department-caused delay. Obtain the Department's approval before storing material due to a delay.

109.05 Blank.

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109.06 Progress Payments.

109.06.1 Application for Progress Payment. In order to receive payment, the Design-Builder shall submit to the Department a written Application for Progress Payment including receipts, invoices, or other vouchers, including payments to subcontractors. Applications for Progress Payment shall be made to the Department monthly. Said invoices shall be based on the proportionate quantities of the various classes of work satisfactorily designed, checked, and completed or incorporated in the Work in accordance with the Schedule of Work and the value thereof determined from the Contract Payout Schedule.

109.06.2 Payment. All invoice payments shall be subject to correction in subsequent invoices and payments and upon the final acceptance and payment. No payment shall be made when, in the judgment of the Department, the Work is not proceeding in accordance with the provisions of the Contract or when the total value of the Work done since the last estimate amounts to less than \$5,000 dollars. Portions of the progress payment may be withheld in accordance with provisions of this Contract including the Project Requirements in the RFP.

The Design-Builder may submit to the Department an Application for Progress Payment monthly during prosecution of the Work, on forms and media approved by the Department. Upon the request of the Department, the Design-Builder shall submit backup documentation including copies of Receipts, Invoices, and an itemization of payments to Subcontractors.

If any Application is inconsistent with the Projected Payment Schedule, backup documentation, or the actual progress of Work, the Application shall include a written explanation for such inconsistencies. The Department will consider all documentation provided in accordance with this Section as it prepares the Progress Payment.

If the Design-Builder does both of the following, then the Department will pay all Conforming and approved Progress Payments, less retainage and any amounts the Department may withhold pursuant to this Contract, within fifteen (15) Days of Receipt of the Conforming Application, except as otherwise provided in the Contract.

- A. Submits Applications for Progress Payments in an electronic form approved by the Department, and
- B. accepts electronic transfer of payments in a manner approved by the Department.

In other cases, the Department will make payment within thirty (30) Days, except as otherwise provided in the Contract. These payment obligations shall not apply in the event of unforeseeable circumstances such as insufficient legislative appropriations, information systems failure, and other Uncontrollable Events. All payments made are subject to correction in subsequent Progress Payments and the Final Payment.

109.06.3 Mobilization Payments. Mobilization includes the mobilization and demobilization of all resources as many times as necessary during the Work. The maximum amount that the Department will pay for Mobilization is ten percent (10%) of the Lump Sum Price.

Upon approval of all pre-construction submittals required for approval by this Contract including those listed in 110.4.3. Conference, the Design-Builder may request payment of up to fifty percent (50%) of the Lump Sum price for Mobilization. After the Department determines that the Work is fifty percent (50%) complete, the Design-Builder may request the remaining fifty percent (50%) of the Lump Sum price for Mobilization.

109.07 Payment for Material on Hand. Partial payments may be made for materials to be incorporated in the work, provided the materials meet the requirements of the Contract and are delivered on, or in the vicinity of, the Project site and stored in acceptable places. Partial payments will not exceed 90 percent of the amount supported by copies of paid invoices, freight bills, or other supporting documents required by the Department. The quantity paid will not exceed the corresponding quantity estimated in the Contract.

No partial payment will be made on living or perishable materials until incorporated in the work.

When material payments exceed \$100,000.00 or 10 percent of the total Contract amount, whichever is less, notarized copies of paid invoices or copies of canceled checks for all such materials must be submitted to the Department within 45 days of the end date of the estimate on which the material allowance was paid. Failure to provide such documentation will result in the deduction of such material allowance from future estimates until documentation is provided.

109.08 Payment for Material Not on Hand. Upon receipt of a written request by the Design-Builder, partial payment may be made for acceptable, fully-fabricated, nonperishable materials not delivered that are unique to the Project provided the materials meet the requirements of the Contract and are stored in excess of 30 days at locations approved by the Department, preferably within the State of New Hampshire, and provided all required certificates of compliance, mill test reports, shop inspector's acceptance, and any other required materials certification have been furnished. Though not fully fabricated, an exception may be allowed for payment for structural steel plate, beams, bearing piles, and reinforcing steel; partial payment for these items may be made as stipulated below. Materials shall be identifiable and accessible for inspection. Storage areas shall provide adequate protection so that such materials will meet the Contract requirements upon delivery to the site.

Partial payment will be based on the material invoices the Design-Builder shall furnish to the Department. Notarized copies of paid invoices or copies of canceled checks for all such materials must be submitted to the Department within 45 days of the end date of the estimate on which the material allowance was paid. Failure to provide such documentation will result in the deduction of such material allowance from future estimates until documentation is provided.

Payment shall not exceed 90 percent of the amount supported by copies of paid invoices, freight bills, or other supporting documents. No payment will be made on materials for any item in the Contract whose total dollar value is less than \$5,000. Approval of partial payment will not constitute acceptance of the materials for use in completing items of work.

109.09 Payments to Subcontractors. Within 21 days of the issuance of progress payments, the Design-Builder shall pay, in full, all Subcontractors and suppliers for the value of satisfactorily completed work and materials placed under the Contract and for materials in accordance with 109.07 or 109.08 paid for in the progress payments. If the Design-Builder withholds any portion of payment from a Subcontractor, the Design-Builder shall, within the same timeframe, demonstrate to and obtain acknowledgement from the NH DOT Compliance Review Officer that the Design-Builder has reasonable cause that the Subcontractor failed to complete work satisfactorily, or portions thereof; or that the supplier failed to provide materials as specified above. When the Design-Builder is found in noncompliance with this specification, sanctions will be imposed as determined by the Department.

For purposes of this Section, satisfactorily completed means:

The Sub Contractor has fulfilled the Contract requirements of the Design-Builder including the submission of all documentation required by the Contract and the subcontract.

109.10 Acceptance and Final Payment. When the project has been accepted as provided in 105.17 and 107.14 and upon submission by the Design-Builder of all required reports, completed forms, and certifications, the Department will prepare the final estimate of the Work performed. The Design-Builder may be required to certify that all bills for labor and material used under this Contract have been paid.

If the Design-Builder accepts the final estimate or files no claims or objections to the quantities therein within 60 days of receiving the final estimate, the Department will process the estimate for final payment. Upon acceptance of the final estimate by the Design-Builder or after the 60 day waiver of claims, payment will be made for the entire sum found to be due after deducting all previous payments and all amounts to be retained or deducted under the provisions of the Contract.

If the Design-Builder files a claim under the Contract requirements, it shall be submitted in accordance with 105.18. Upon review or final adjudication of the claim, any additional payment determined to be due the Design-Builder will be placed on a supplemental estimate and processed for payment.

All prior partial estimates and payments shall be subject to correction in the final estimate and payment. If the final estimate shows an overpayment was made to the Design-Builder, then the Design-Builder shall pay this amount to the Department within 60 days of receipt of the final estimate, unless a valid claim has been filed in accordance with 105.18. If the Design-Builder fails to make the reimbursement as prescribed, the Department will send a Notice of Non-Payment letter giving the Design-Builder an additional 30-days to make payment. If payment is not received as prescribed the Department will, in writing, temporarily suspend the Design-Builder's bidding privileges for 60 days. If the Design-Builder fails to make the reimbursement within the suspension, the Department will, in writing, initiate steps to remove the Design-Builder from the Pre-Qualifications list and refer the matter to the Attorney General's Office for further action and Surety notification.

SECTION 110

SECTION 110- GENERAL RIGHTS AND RESPONSIBILITIES

110.01 General.

110.01.1 Basic Roles of the Parties. The Design-Builder has the authority and responsibility to perform all Work in Conformity with the Contract. The Department has the authority and responsibility to assure that the Design-Builder does so.

110.01.2 Joint Covenants of Good Faith and Fairness. The Contract imposes an obligation of good faith and fair dealing on both parties in the execution, performance, interpretation, and enforcement of the Contract. With a positive commitment to honesty and integrity, the Design-Builder and the Department agree to function within all applicable laws, statutes, regulations, and Contract provisions; avoid hindering each other's performance; fulfill all obligations diligently; and cooperate in achievement of the Contract.

110.02 Department's General Authority and Responsibilities.

110.02.1 Right-of-Way. See the Project Requirements in the RFP for information regarding Right-of-Way.

110.02.2 Permits. Except as provided otherwise in the RFP, the Department will not furnish Permits required to perform the Work within the Project Limits. See the Project Requirements in the RFP for additional information regarding Permits.

110.02.3 Authority of Department Representative. After Notice to Proceed, the Department Representative have the authority to take all actions needed to assure that the Design-Builder is performing the Work in Conformity with the Contract. Except as provided elsewhere in the Contract, the Department Representative will decide all questions regarding Work performed, suspension of Work, and the interpretation of the Contract. The Department Representative has the authority to reject Unacceptable or Unauthorized Work and refuse to approve Progress and Final Payments until the Unacceptable or Unauthorized Work is corrected.

110.02.4 Right to Review Design Documents and Inspect Work. The Department may review the Design-Builder's Design Documents, including shop drawings, product data, samples, and other submittals, but only for conformance with the Contract Documents, or as otherwise specified. The Department's review does not constitute acceptance of the design. The Department will not have control over and will not be responsible for the acts or omissions of the Design-Builder, the Design-Builder's licensed design professionals, Subcontractors, or any other persons performing any portion of the Work for the Design-Builder.

The Department has the authority to inspect all Materials and every detail of the construction of the Work. Such authority includes rejecting Work that does not conform to the Contract Documents. For a related provision, see 104.3.5 – Duties Regarding Inspection of Work by the Department or Others.

110.02.5 Right to Suspend Work. The Department has the right to suspend any or all Work at any time for any reason. For related provisions, see 105.14.

110.03 Design-Builder's General Authority and Responsibilities.

110.03.1 General Duty to Cooperate. The Design-Builder shall cooperate with Departmental personnel, Utility Companies, railroad personnel, marine traffic personnel, regulating agencies with jurisdiction, other firms, municipalities, and the public in every reasonable way possible. For a related provision, see 110.04.

110.03.2 Furnishing of Other Property Rights, Licenses and Permits. The Design-Builder shall acquire, at its sole expense, all temporary property rights outside the Project Limits needed for construction staging, yarding, construction, waste disposal, or other Project-related purpose. The Design-Builder shall also acquire, at its sole expense, all licenses and Permits necessary to perform the Work that are not furnished by the Department.

110.03.3 Duty to Notify Department If Ambiguities Discovered. After the Award of a Contract to the Bidder, the Design-Builder is solely responsible for the design work in accordance with the Contract. As such, the Design-Builder has no right to claims for any ambiguity, error, omission, conflict, or discrepancy (“ambiguity, etc.”) contained in the Contract documents. For a related provision, see 102.02.3.2.

110.03.4 Workers and Equipment. The Design-Builder shall at all times provide all design professionals, superintendents, foremen, laborers, inspectors, subcontractors, subconsultants, equipment, materials, and incidentals needed to perform the Work in conformance with the Design-Builder’s schedule of work and within the Contract Time.

During the course of the Project, if the Design-Builder proposes to replace any of the Key Personnel identified in its Proposal or Statement of Qualifications, a written request shall be submitted to the Department that explains the circumstances necessitating the replacement, and that provides the name, experience, and qualifications of the proposed substitute. Upon the Department’s approval, the substitute shall be assigned to the Project. If the Department rejects the substitute, the Design-Builder shall submit the name and qualifications of a second substitute within five (5) Days. Such process shall be repeated until a proposed replacement meets the Department’s approval.

During all hours of on-site construction activity, the Design-Builder shall provide an on-site, competent, English-speaking Project Manager experienced in the type of Work being performed. The Project Manager shall be capable of reading and understanding the Plans and Specifications, providing and receiving communications, and scheduling and coordinating the Work. The Project Manager shall have full authority to manage the Work in accordance with the Contract. Such project management must be provided regardless of the amount of Work being done by Subcontractors.

All persons employed by or through the Design-Builder shall have sufficient skill and experience, and hold the necessary licenses and certifications, to perform the Work properly. The Department may require that the Design-Builder discharge any such person who the Department determines jeopardizes safety of any person or the Project without cost or liability to the Department. If the Department determines that such person’s performance jeopardizes the intent of the Contract otherwise, the Department may, but is not required, to notify the Design-Builder of such a determination. Such notice, or lack thereof, does not affect the Design-Builder’s duties regarding Workers. Upon Receipt of such notice, the Design-Builder shall take any action it determines necessary to fulfill its obligations under the Contract.

110.03.5 Duties Regarding Inspection of Work by the Department or Others.

- A. **Safe Access.** The Design-Builder shall provide the Department with safe access to all portions of the Work in Conformity with all applicable OSHA requirements. The Design-Builder shall furnish the Department with all information and assistance required to make a detailed inspection. For a related provision, see 110.02.4.
- B. **Inspection By Others.** If any other governmental entity, Utility Company, or railroad is authorized to inspect Work, the Design-Builder must provide their representatives with safe access that Conforms to this Section.

110.03.6 Project Records. Upon request by the Department, the Design-Builder or any other person working for the Design-Builder possessing Project Records must provide the Department with copies of Project Records at all reasonable times without cost or liability to the Department. Unless the context clearly indicates otherwise, Project Records are the property of the Department. The Design-Builder must retain Project Records for at least three years after Final Acceptance or for any applicable warranty period, whichever is longer.

110.03.7 Interpretation and Interpolation. The Design-Builder is responsible for all interpretations and interpolations made from information provided in the RFP Documents and Contract, including data and test results related to location, survey, hydrology, hydraulics, soils, ledge quality, existing Structures, Environmental Information, and Geotechnical Information.

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110.04 Communication and Coordination. The Design-Builder will prepare minutes of all meetings and distribute them to all attendees. Any requests to revise the minutes must be made to the Design-Builder within five (5) Days of Receipt. These minutes will constitute the final record of the meeting.

110.04.1 Partnering.

- A. **Definition, Purpose, and Applicability.** Partnering is a process of mandatory structured communication between the Department, the Design-Builder, its principal Subcontractors and suppliers, and other Project stakeholders for the purpose of improving efficiency and minimizing Disputes. Partnering, including the establishment of a partnership charter, does not in any way waive, alter, or otherwise affect any provision of the Contract. The associated costs of Partnering will be agreed to mutually and shared equally.
- B. **Initial Partnering Workshop.** If the Design-Builder and the Department elect to participate in Partnering, representatives of both parties will arrange a facilitated initial Partnering Workshop, which shall be held before the start of on-site construction. The Department Project Manager and/or the Contract Administrator and the Project Manager will determine Workshop attendees, the facilitator, agenda, duration, and location. Key Project level supervisory personnel, corporate/State level management personnel, and key Project personnel of the Design-Builder's principal Subcontractors and suppliers shall attend. Project design Engineers, FHWA, local government representatives, environmental regulators, emergency service personnel, Utility Companies, impacted business and/or landowners, and other stakeholders may also be invited to attend. The product of the initial Partnering Workshop will be a partnership charter. This charter will include mutually agreed upon Project goals and communication escalation procedures.
- C. **Follow-Up Workshops.** The Design-Builder and the Department may agree to hold follow-up Partnering Workshops periodically throughout the duration of the Contract.

110.04.2 Pre-activity Meetings. The Design-Builder shall prepare an agenda and arrange pre-activity meetings prior to the commencement of all major work activities including design. Attendees must be shown on the agenda and agreed to by the Department. The Design-Builder shall notify all attendees forty-eight (48) hours in advance of the meeting.

110.04.3 Preconstruction Conference. After the Contract has been executed and before the start of on-site construction by the Design-Builder, the Design-Builder will schedule a preconstruction conference that must be attended by the Department and the Project Manager. Others may be invited to attend, including Subcontractors, FHWA, local government representatives, environmental regulators, public relations firms, emergency service personnel, Utility Companies, municipal officials, impacted business representatives and/or landowners, or other Project stakeholders. Meeting agenda shall be established by the Design-Builder and agreed to by the Department prior to the meeting.

110.04.4 Progress Meetings. Except as provided otherwise in this 104.04.4 shall be held at regular intervals, but at least monthly, throughout the duration of the Contract. The Design-Builder shall establish and the Department will agree upon the agenda for each Progress Meeting. All personnel of the Department and the Design-Builder who have significant information relevant to agenda items shall attend. Others may be invited to attend including Subcontractors, FHWA, municipal officials, environmental regulators, emergency service personnel, Utility Companies, impacted landowners, impacted business representatives, public relations firms, or other Project stakeholders.

In lieu of a Progress Meeting, the Department Project Manager and the Project Manager shall exchange written communication by letter, fax, or e-mail before or on the scheduled Progress Meeting date that indicates there is no need for the meeting because the Work is on schedule, compensation is current, communication is ongoing, and there are no significant outstanding or anticipated issues, disputes, or claims. The Project Manager's written communication shall also contain a description of:

- A. progress of the Project since the last Progress Meeting or communication in lieu thereof, and
- B. expected activities before the next scheduled Progress Meeting.

110.04.5 Early Negotiation.

- A. **Notice Required.** When the Design-Builder becomes aware of facts or circumstances (“Issue”) that may cause the Design-Builder to seek additional compensation, time, or any other change in Contract requirements, then the Design-Builder shall notify the Department within forty-eight (48) hours and before commencing any part of the Work relating to the Issue. The notice must describe the basic nature and extent of the Issue. See 104.02

Such notice may be verbal only if confirmed in writing in one of the two following ways:

- 1. If a Progress Meeting is held within ten (10) Days of the date that the Issue became known, such Notice may be confirmed with an entry in the Progress Meeting minutes. Such entry must describe the basic nature and extent of the Issue.
- 2. Otherwise, the Design-Builder shall confirm a verbal notice by Delivering to the Contract Administrator, within ten (10) Days of the date the Issue arose, a written Notice that describes the basic nature and extent of the Issue.

The written notice or confirmation will be known as a “Notice of Issue for Consideration”. The Design-Builder will not be entitled to any additional compensation, time, or any other change to Contract requirements without a timely Notice of Issue for Consideration.

- B. **Negotiation.** When the Department receives the Notice of an Issue for Consideration Conforming to 104.04.5.A, Notice Required, the Department and the Design-Builder will negotiate in good faith to attempt to resolve the Issue. Any resolution will be noted in the Progress Meeting minutes or confirmed otherwise in writing by the Department. Any changes to the Contract that affect compensation, time, quality, or other Contract requirements shall be by written Contract Revision.

110.04.6 Utility Coordination.

- A. **Pre-construction Utility Conference.** A pre-construction utility meeting will be held to coordinate the Work of the Design-Builder and the Work of affected Utility Companies. Usually this meeting will be held on the same day as and immediately before the pre-construction but, in any event, will be held before the start of on-site construction by the Design-Builder that affects Utility Facilities. The Department, the Design-Builder’s Superintendent, Subcontractors as required, and a representative of each affected Utility Company will attend. The Design-Builder shall prepare minutes of the pre-construction utility meeting and distribute them to all attendees. Any requests to revise the minutes must be made to the Design-Builder within five (5) Days of distribution. These minutes will constitute the final record of the meeting.

110.04.7 Coordination of Bridge and/or Highway Closure/Bridge Width Restriction Notification.

When a bridge or highway closure or width restriction is allowed by the Contract, prior to a closure or to a bridge width restriction to a single lane less than twelve (12) feet, the Design-Builder shall notify effected public officials, agencies, other entities and the public of the date on which the closure/width restriction will begin and the anticipated duration of the closure/restriction, as indicated below.

A Public Notice shall be published in a local newspaper ten (10) Days prior to and then again the day before, the beginning of the closure/restriction.

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The closure/restriction announcement shall be placed on a local radio station during the week preceding commencement of the closure/restriction. The announcement shall run a minimum of three times daily. The closure will also be announced on portable/changeable message signs, placed in approved locations, beginning at least ten (10) Days prior to the closure.

The Design-Builder shall notify the following public officials, agencies, and organizations ten (10) Days prior to, and then again the day before, of the date of the beginning of the closure/restriction and the anticipated length of the closure/restriction. When the bridge or highway is reopened/unrestricted to traffic, the following list will again be notified. The Design-Builder shall provide the Department with documentation that the listed public officials, agencies and organizations received the notification at least ten (10) Days prior to the closure/restriction or with proof that the notification was mailed fifteen (15) Days prior to the closure/restriction.

- A. Town Officials (Manager or First Selectman)
- B. Fire Department
- C. Police Department
- D. State Police
- E. Rescue Services
- F. School Department
- G. Post Office
- H. Chamber of Commerce
- I. Any Large Employers
- J. NHDOT Transportation Management Center
- K. NHDOT Permit Office
- L. Department of Safety
- M. NHDOT Maintenance District Office,
- N. NHDOT Public Information Officer.

110.05 Subcontracting.

110.05.1 Limits on Subcontracting. The Design-Builder shall perform at least thirty percent (30%) of the value of the Work with its own Work force, excluding any percentage performed by Disadvantaged Business Enterprises in satisfaction of specific Contract goals (if any).

The Design-Builder shall not carry the Workers of another recognized Contractor or firm on its payroll or a Subcontractor's payroll. The Design-Builder shall not use any Subcontractors that are debarred from submitting a Proposal by the Federal Government or any agency of the State of New Hampshire.

110.05.2 Design-Builder's Duties Regarding Subcontractors. The Design-Builder is responsible for assuring that its Subcontractors (including design consultants) have sufficient skill and experience, and professional qualifications and licenses, to perform the Work properly and for coordinating and managing its Subcontractors to achieve the intent of the Contract. Except as provided otherwise in this Contract, the Design-Builder waives all claims arising from failure to coordinate and manage its Subcontractors and indemnifies and hold harmless the Department from any such claims. Subcontracting does not alter the Design-Builder's obligations under the Contract. For a related provision, see 104.01.

110.05.3 Documentation Regarding Subcontracting. Within fifteen (15) days of Notice to Proceed and before any Work is performed by a Subcontractor, the Design-Builder shall provide the Department with the following:

- A. A list of all Subcontractors, not identified in the Proposal or SOQ, that the Design-Builder anticipates will be providing Work within the Project Limits and a general description of the items of Work that will be performed by each Subcontractor; and
- B. A written certification by the Design-Builder that:

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1. no Subcontractors are debarred from bidding by the Federal Government or any agency of the State of New Hampshire, and
2. all subcontracts with Subcontractors contain or incorporate by reference all applicable portions of the Contract including the federal provisions contained in Appendix A to the Design-Build General Provisions, if applicable.

The Design-Builder shall continuously update the list referenced in (A) above and provide it to the Department throughout the duration of the Project.

If requested by the Department, the Design-Builder shall provide the Department with copies of any subcontract or other document that establishes the relationship of the Design-Builder and any Subcontractors. The Design-Builder may omit, remove, or obscure any Prices shown in the copy of the subcontract submitted to the Department.

110.05.4 Discharge of Subcontractors. The Department, upon written notice to the Design-Builder, may require that the Design-Builder discharge any Subcontractor that the Department determines jeopardizes safety of any person or the Project without cost or liability to the Department. If the Department determines that a Subcontractor's performance jeopardizes the intent of the Contract otherwise, the Department may, but is not required, to notify the Design-Builder of such a determination. Such notice, or lack thereof, does not affect the Design-Builder's duties regarding Subcontractors. Upon Receipt of such notice, the Design-Builder shall take any action it determines is necessary to fulfill its obligations under the Contract.

110.05.5 Flow Down. All subcontracts of the Design-Builder, and all lower tier subcontracts, shall contain or reference all applicable provisions of the Contract, including, but not limited to, all safety, wage, Prompt payment, labor, environmental, equal opportunity, and insurance provisions. The Design-Builder indemnifies and holds harmless the Department against any and all claims or liabilities arising from the failure to include such flow down provisions.

110.05.6 Warranty and Maintenance Bonds. Warranty and Maintenance Bonds may be required of a Subcontractor for specified items that the Department deems appropriate. Refer to the Project Requirements in the RFP in the RFP to determine whether warranty or maintenance bonds are required. The Design-Builder shall provide a copy of said bond to the Department before the performance of any affected on-site Work. Should a Subcontractor be required to provide a Warranty or Maintenance Bond, the Design-Builder hereby authorizes the Department to directly contact the Subcontractor(s) in question and/or its Surety in the event of a failure of the bonded item to perform as specified.